DE/AFS/SF
cc: B. Rogers
S Van Zanat
TFRO

COPY

October 9, 2006

T1-060445
Permit No.: T2-060446

Facility ID No.: 031-00026

PID: V052/T2S

RECEIVED
OCT 12 2006
Department of Environmental Quality
State Air Program

Logged: ✓

Mr. Mike Simon
Stationary Source Program Manager
Idaho Department of Health and Welfare
Division of Environmental Quality
1410 North Hilton
Boise, Idaho 83706

Re: Sinclair Burley Products Terminal (Sinclair)
Sinclair Transportation Company
Tier 1 Operating Permit No. T1-030413 / Tier 2 Operating Permit No. T2-030419
AIRS Facility No. 031-00026
Transmittal of Tier 1 and Tier 2 Operating Permit Application Renewals

Mr. Simon:

Sinclair is currently operating under the provisions of its Tier 1 operating permit as revised on January 13, 2004. The current Tier 1 permit expires on July 4, 2007. With this correspondence, Sinclair is formally submitting its application to renew the Tier 1 permit for this facility. Per the guidance listed in IDAPA 58.01.01.313.03 of Idaho Rules for the Control of Air Pollution, Sinclair is submitting this application nine months prior to operating permit expiration.

Sinclair is also currently operating under the provisions of its Tier 2 operating permit as revised on August 20, 2003. The current Tier 2 permit expires on October 30, 2007. Because of the similarity between the provisions of the Tier 1 and Tier 2 permits, Sinclair is requesting this Tier 1 permit application renewal also be used as the Tier 2 permit application renewal. By combining the Tier 1 and Tier 2 applications in this manner, Sinclair believes there with be considerable savings on the time and effort both the Division and Sinclair will spend processing these documents.

In compiling this operating permit application renewal, Sinclair is using the same format used for previous operating permit applications. Sinclair believes this format is acceptable to the Division and complies with the requirements of IDAPA 58.01.01.314 of Idaho Rules for the Control of Air Pollution.

Please note there are no substantial changes contained in this permit application, compared to the previous permit application, with exception of the addition of the Soil Vapor Extraction system. In general, Sinclair believes the provisions listed in the current Tier 1 and Tier 2 permits accurately reflect the applicable requirements for this facility.

Sinclair believes this operating permit application renewal is accurate, timely and complete and therefore requests the Division grant an operating permit application shield for both the Tier 1 and Tier 2 permits. Sinclair appreciates the assistance of the Division in facilitating these permit renewals. Should you have any questions regarding the information in this application, please call me at (801) 524-2729.

Respectfully,

S.B. Greene

Samuel B. Greene P.E.
Corporate Air Quality Engineer

attachments

cc: M. Peterson w/o/a
J. Maffuccio w/o/a
D. Cole

TIER 1 OPERATING PERMIT APPLICATION - RENEWAL
SINCLAIR BURLEY PRODUCTS TERMINAL
SINCLAIR TRANSPORTATION COMPANY

Table of Contents

1.0 INTRODUCTION

Sinclair Burley Products Terminal, Sinclair Transportation Company (Sinclair) operates a petroleum products receipt, storage and distribution facility located in Burley, Idaho. This facility is currently operating under the provisions of Tier 1 Operating Permit No. T1-030413 and Tier 2 Operating Permit No. T2-030419. Tier 1 Operating Permit No. T1-030413 was issued on July 4, 2002 and revised on January 13, 2004. The current Tier 1 operating permit expires on July 4, 2007.

The Tier 2 operating permit was issued on October 30, 2002, revised on July 16, 2003 and revised again on August 20, 2003. The current Tier 2 operating permit expires on October 30, 2007.

Sinclair is requesting this Tier 1 permit application renewal also be used as the Tier 2 permit application renewal. By combining the Tier 1 and Tier 2 applications in this manner, Sinclair believes there with be considerable savings on the time and effort both the Division and Sinclair will spend processing these documents.

This permit application has been written to present all information required by the Division necessary to support a Tier 1 operating permit. The application is divided into the following chapters:

Chapter 2.0: Contains the Tier 1 Operating Permit application forms required by DEQ.

Chapter 3.0: Contains the general information for the facility.

Chapter 4.0: Describes excess emissions procedures.

Chapter 5.0: Provides information on emissions units.

Chapter 6.0 Lists insignificant activities.

Chapter 7.0: Addresses the regulatory requirements for this facility.

Chapter 8.0: Contains the compliance certification.

2.0 PERMIT APPLICATION FORMS

The Tier 1 operating permit application forms for the Emissions Units (EU) listed in Table 2.1 are presented in this chapter.

Table 2.1 Listing of Emissions Units

EU #	Description
1	Tank 301
2	Tank 304
3	Tank 311
4	Tank 321
5	Tank 302
6	Tank 305
7	Tank 306
8	Transmix Tank
9	Prover Tank
10	Loading Rack
11	Fugitive Emissions
N/A	Soil Vapor Extraction System

SECTION 1: GENERAL INFORMATION

COMPANY & DIVISION NAME	SINCLAIR BURLEY PRODUCTS TERMINAL, SINCLAIR TRANSPORTATION COMPANY Tier 1/Tier 2 Renewal, 10/9/06
STREET ADDRESS OR P.O. BOX	425 East Highway 81
CITY	Burley
STATE	ID
ZIP	83318
PERSON TO CONTACT	Facility Contact: Dave Cole / Permitting Contact: Samuel B. Greene P.E.
TITLE	Terminal Manager / Corporate Air Quality Engineer
PHONE NUMBER	(208) 678-7363 (801) 524-2729
EXACT PLANT LOCATION	T-10, S-36, R-23E
GENERAL NATURE OF BUSINESS	Petroleum products receipt, storage and distribution
NUMBER OF FULL-TIME EMPLOYEES	2
PROPERTY AREA (ACRES)	Approx. 15

REASON FOR APPLICATION: 7

(1) Permit to Construct a new facility;
(2) Permit to Modify an existing source;
(3) Permit to Construct a new source at an existing facility;
(4) Change of Owner or Location;
(5) Tier I Permit to Operate;
(6) Tier II Permit to Operate
(7) Tier II Permit to Operate - Application Renewal

DISTANCE TO NEAREST STATE BORDER (MILES)	60		
PRIMARY SIC	5171	SECONDARY SIC	5171
PLANT LOCATION COUNTY	Cassia	ELEVATION (FT)	4180
UTM ZONE	12		
UTM (X) COORDINATE (KM)	277123	UTM (Y) COORDINATE (KM)	4710315

List all facilities within the state that are under your control, or under common control, and have emissions to the air. If none, so state

NAME OF FACILITIES	LOCATION OF OTHER FACILITIES
Burley Products Terminal	425 East Hwy. 81 Burley, ID 83318 Cassia County
Boise Products Terminal	712 North Curtis Boise, ID 83706 Ada County

OWNER OR RESPONSIBLE OFFICIAL	Mark Petersen
TITLE OF RESPONSIBLE OFFICIAL	Vice President, Sinclair Transportation Company

Based on information and belief formed after reasonable inquiry, I certify the statements and information in this document are true, accurate, and complete.

SIGNATURE OF OWNER OR RESPONSIBLE OFFICIAL

DATE: 10/11/06

SECTION 3: PROCESS AND MANUFACTURING OPERATIONS

DEQ USE ONLY

DEQ PLANT ID CODE		DEQ PROCESS CODE		DEQ STACK ID CODE	
DEQ BUILDING ID CODE		PRIMARY SCC		SECONDARY SCC	
DEQ SEGMENT CODE					

PART A: GENERAL INFORMATION

PROCESS CODE OR DESCRIPTION	EU#1 (TK #301), EU#2 (TK #304), EU#3 (TK #311), EU#4 (TK #321) Tier 1/Tier 2 Renewal, 10/9/06				
STACK DESCRIPTION	N/A				
BUILDING DESCRIPTION	N/A				
MANUFACTURER	N/A	MODEL	Ext. Floating Roof	DATE INSTALLED OR LAST MODIFIED	1950

PROCESSING DATA

PROCESS STREAM	MATERIAL DESCRIPTION	MAXIMUM HOURLY RATE	ACTUAL HOURLY RATE	ACTUAL ANNUAL RATE	UNITS
INPUT	Gasoline	65,100			gal
PRODUCT OUTPUT	Gasoline	65,100			gal
WASTE OUTPUT					
RECYCLE					

POTENTIAL HAPS IN PROCESSING STREAMS

PS DESCRIPTION	HAP CAS NUMBER	FRACTION IN INPUT STREAM BY WEIGHT	FRACTION IN PRODUCT STREAM BY WEIGHT	FRACTION IN WASTE STREAM BY WEIGHT	FRACTION IN R CLE STREAM BY WEIGHT
Benzene	71-43-2	0-.04250	0-.04250		
Hexane	110-54-3	0-.0350	0-.0350		
Xylenes (mixed isomers)	1330-20-7	0-.1777	0-.1777		
Toluene	108-88-3	0-.2180	0-.2180		
Ethylbenzene	100-41-4	0-.02860	0-.02860		
Naphthalene	91-20-3	0-.0064	0-.0064		
Trimethylpentane (2,2,4)	540-84-1	0-.08432	0-.08432		
Isopropyl Benzene	98-82-8	0-.0025	0-.0025		

SECTION 5: STORAGE AND HANDLING OF LIQUID SOLVENTS & OTHER VOLATILE COMPOUNDS

DEQ USE ONLY

DEQ PLANT ID CODE		DEQ PROCESS CODE		DEQ STACK ID CODE	
DEQ BUILDING ID CODE		PRIMARY SCC		SECONDARY SCC	
DEQ SEGMENT CODE					

PART A: GENERAL INFORMATION

PROCESS CODE OR DESCRIPTION	EU#1 (TK #301), EU#2 (TK #304), EU#3 (TK #311), EU#4 (TK #321) Tier 1/Tier 2 Renewal, 10/9/06
STACK DESCRIPTION	N/A
BUILDING DESCRIPTION	N/A
DATE INSTALLED OR LAST MODIFIED	1950

GENERAL TANK AND MATERIAL HANDLING DATA

MATERIAL DESCRIPTION	Gasoline		
TANK CAPACITY (GALLONS)	840,000	ANNUAL THROUGHPUT (GALLONS)	86.359 E 6
TANK TYPE	2	SOURCE	1

TANK TYPE — PLEASE CHOOSE FROM BELOW
(01) FIXED ROOF;
(02) FLOATING ROOF (OR INTERNAL COVER);
(03) VARIABLE VAPOR SPACE;
(04) PRESSURE TANK;
(05) UNDERGROUND - SPLASH LOADING;
(06) OTHER

SOURCE — PLEASE CHOOSE FROM BELOW
(01) PIPELINE;
(02) RAIL CAR;
(03) TANK TRUCK;
(04) SHIP BARGE;
(05) OTHER

ADDITIONAL VAPOR PHASE DEGREASING DATA

MANUFACTURER OF DEGREASING AGENT	N/A	TANK SURFACE AREA (SQ. FT)	See Tanks 4.0
TEMPERATURE OF DEGREASING AGENT IN TANK (DEG. F)	N/A	METHOD OF VAPOR RECOVERY	6

METHOD OF VAPOR RECOVERY
Please choose from below:
(01) Incineration;
(02) Refrigerated Liquid Scrubber;
(03) Refrigerated Condenser;
(04) Carbon Adsorption;
(05) Vapor Return System;
(06) No Recovery System;
(07) Other

ADDITIONAL MATERIAL HANDLING DATA

PHYSICAL STATE (SEE NOTE BELOW)	L	NUMBER OF PUMP SEALS	0	NUMBER OF COMPRESSOR SEALS	0	NUMBER OF IN-LINE VALVES	11
NUMBER OF SAFETY RELIEF VALVES	1	NUMBER OF FLANGES	20	NUMBER OF OPEN-ENDED LINES	0	NUMBER OF SAMPLING CONNECTIONS	6

MATERIAL DATA

HAP DESCRIPTION	HAP CAS NUMBER	HAP FRACTION IN MATERIAL BY WEIGHT
Benzene	71-43-2	0-.04250
Hexane	110-54-3	0-.0350
Xylenes (mixed isomers)	1330-20-7	0-.1777
Toluene	108-88-3	0-.2180
Ethylbenzene	100-41-4	0-.02860
Naphthalene	91-20-3	0-.0064
Trimethylpentane (2,2,4)	540-84-1	0-.08432
opropyl Benzene	98-82-8	0-.0025

NOTE: PHYSICAL STATE - V) VAPOR LIGHT; L) LIQUID LIGHT; H) HEAVY LIGHT

SECTION 5, PART B

EU#1 (TK #301), EU#2 (TK #304), EU#3 (TK #311), EU#4 (TK #321) Tier 1/Tier 2 Renewal, 10/9/06

OPERATING DATA

PERCENT FUEL CONSUMPTION PER QUARTER

DEC-FEB	25
MAR-MAY	25
JUN-AUG	25
SEP-NOV	25

OPERATING SCHEDULE

HOURS/DAY	24
DAYS/WEEK	7
WEEKS/YEAR	52

POLLUTION CONTROL EQUIPMENT

PARAMETER	PRIMARY	SECONDARY
TYPE	N/A	N/A
TYPE CODE (FROM APP. A)		
MANUFACTURER		
MODEL NUMBER		
PRESSURE DROP (IN. OF WATER)		
WET SCRUBBER FLOW (GPM)		
BAGHOUSE AIR/CLOTH RATIO (FPM)		

VENTILATION AND BUILDING/AREA DATA

ENCLOSED? (Y/N)	N/A
HOOD TYPE (FROM APP. B)	
MINIMUM FLOW (ACFM)	
PERCENT CAPTURE EFFICIENCY	
BUILDING HEIGHT (FT)	
BUILDING LENGTH (FT)	
BUILDING WIDTH (FT)	

STACK DATA

GROUND ELEVATION (FT)	N/A
UTM X COORDINATE (KM)	
UTM Y COORDINATE (KM)	
STACK TYPE (SEE NOTE BELOW)	
STACK EXIT HEIGHT FROM GROUND LEVEL (FT)	
STACK EXIT DIAMETER (FT)	
STACK EXIT GAS FLOWRATE (ACFM)	
STACK EXIT TEMPERATURE (DEG. F)	

AIR POLLUTANT EMISSIONS

POLLUTANT	CAS NUMBER	EMISSION FACTOR (SEE NOTE BELOW)	PERCENT CONTROL EFFICIENCY	ESTIMATED OR MEASURED EMISSIONS (LBS/HR)	ALLOWABLE EMISSIONS (LBS/HR)	ALLOWABLE EMISSIONS (TONS/YR)	REFERENCE
PM							
PM-10							
SO2							
CO							
NOx							
VOC		Tanks 4.0	0	3.46	3.46	15.17	Tanks 4.0
LEAD							
Benzene	71-43-2	Tanks 4.0	0	1.887E-02	1.887E-02	8.266E-02	Tanks 4.0
Hexane	110-54-3	Tanks 4.0	0	3.002E-02	3.002E-02	1.315E-01	Tanks 4.0
Xylenes (mixed isomers)	1330-20-7	Tanks 4.0	0	1.155E-02	1.155E-02	5.059E-02	Tanks 4.0
Toluene	108-88-3	Tanks 4.0	0	2.866E-02	2.866E-02	1.255E-01	Tanks 4.0
Ethylbenzene	100-41-4	Tanks 4.0	0	2.358E-03	2.358E-03	1.033E-02	Tanks 4.0
Naphthalene	91-20-3	Tanks 4.0	0	4.224E-05	4.224E-05	1.850E-04	Tanks 4.0
Trimethylpentane (2,2,4)	540-84-1	Tanks 4.0	0	7.862E-03	7.862E-03	3.444E-02	Tanks 4.0
Isopropyl Benzene	98-82-8	Tanks 4.0	0	1.518E-04	1.518E-04	6.650E-04	Tanks 4.0

NOTES: STACK TYPE - 01) DOWNWARD; 02) VERTICAL (UNCOVERED); 03) VERTICAL (COVERED); 04) HORIZONTAL; 05) FUGITIVE
EMISSION FACTOR - IN LBS/UNITS. PLEASE USE SAME HOURLY UNITS GIVEN IN FUEL DATA SECTION.

SECTION 3: PROCESS AND MANUFACTURING OPERATIONS

DEQ USE ONLY

DEQ PLANT ID CODE		DEQ PROCESS CODE		DEQ STACK ID CODE	
BUILDING ID CODE		PRIMARY SCC		SECONDARY SCC	
DEQ SEGMENT CODE					

PART A: GENERAL INFORMATION

PROCESS CODE OR DESCRIPTION	EU#5 (TK #302), EU#6 (TK #305), EU#7 (TK #306) Tier 1/Tier 2 Renewal, 10/9/06				
STACK DESCRIPTION	N/A				
BUILDING DESCRIPTION	N/A				
MANUFACTURER	N/A	MODEL	Cone Roof	DATE INSTALLED OR LAST MODIFIED	1950

PROCESSING DATA

PROCESS STREAM	MATERIAL DESCRIPTION	MAXIMUM HOURLY RATE	ACTUAL HOURLY RATE	ACTUAL ANNUAL RATE	UNITS
INPUT	Distillate Fuel Oil	58,800			gal
PRODUCT OUTPUT	Distillate Fuel Oil	58,800			gal
WASTE OUTPUT					
RECYCLE					

POTENTIAL HAPS IN PROCESSING STREAMS

SCRIPTION	HAP CAS NUMBER	FRACTION IN INPUT STREAM BY WEIGHT	FRACTION IN PRODUCT STREAM BY WEIGHT	FRACTION IN WASTE STREAM BY WEIGHT	FRACTION IN RECYCLE STREAM BY WEIGHT
Benzene	71-43-2	0-.00003	0-.00003		
Xylenes (mixed isomers)	1330-20-7	0-.00082	0-.00082		
Toluene	108-88-3	0-.00019	0-.00019		
Naphthalene	91-20-3	0-.00170	0-.00170		

SECTION 5: STORAGE AND HANDLING OF LIQUID SOLVENTS & OTHER VOLATILE COMPOUNDS

DEQ USE ONLY

DEQ PLANT ID CODE		DEQ PROCESS CODE		DEQ STACK ID CODE	
DEQ BUILDING ID CODE		PRIMARY SCC		SECONDARY SCC	
DEQ SEGMENT CODE					

PART A: GENERAL INFORMATION

PROCESS CODE OR DESCRIPTION: EU#5 (TK #302), EU#6 (TK #305), EU#7 (TK #306) Tier 1/Tier 2 Renewal, 10/9/06

STACK DESCRIPTION: N/A

BUILDING DESCRIPTION: N/A

DATE INSTALLED OR LAST MODIFIED: 1950

GENERAL TANK AND MATERIAL HANDLING DATA

MATERIAL DESCRIPTION: Distillate Fuel Oil

TANK CAPACITY (GALLONS): 840,000

ANNUAL THROUGHPUT (GALLONS): 155.6 E 6

TANK TYPE: 1

PLEASE CHOOSE FROM BELOW
(01) FIXED ROOF;
(02) FLOATING ROOF (OR INTERNAL COVER);
(03) VARIABLE VAPOR SPACE;
(04) PRESSURE TANK;
(05) UNDERGROUND - SPLASH LOADING;
(06) OTHER

SOURCE: 1

PLEASE CHOOSE FROM BELOW
(01) PIPELINE;
(02) RAIL CAR;
(03) TANK TRUCK;
(04) SHIP BARGE;
(05) OTHER

ADDITIONAL VAPOR PHASE DEGREASING DATA

MANUFACTURER OF DEGREASING AGENT: N/A

TEMPERATURE OF DEGREASING AGENT IN TANK (DEG. F): N/A

TANK SURFACE AREA (SQ. FT): See Tanks 4.0

METHOD OF VAPOR RECOVERY: 6

Please choose from below:
(01) Incineration;
(02) Refrigerated Liquid Scrubber;
(03) Refrigerated Condenser;
(04) Carbon Adsorption;
(05) Vapor Return System;
(06) No Recovery System;
(07) Other

ADDITIONAL MATERIAL HANDLING DATA

PHYSICAL STATE (SEE NOTE BELOW)	H	NUMBER OF PUMP SEALS	0	NUMBER OF COMPRESSOR SEALS	0	NUMBER OF IN-LINE VALVES	10
NUMBER OF SAFETY RELIEF VALVES	2	NUMBER OF FLANGES	14	NUMBER OF OPEN-ENDED LINES	0	NUMBER OF SAMPLING CONNECTIONS	4

MATERIAL DATA

HAP DESCRIPTION	HAP CAS NUMBER	HAP FRACTION IN MATERIAL BY WEIGHT
Benzene	71-43-2	0-.00003
Xylenes (mixed isomers)	1330-20-7	0-.00082
Toluene	108-88-3	0-.00019
Naphthalene	91-20-3	0-.00170

NOTE: PHYSICAL STATE - V) VAPOR LIGHT; L) LIQUID LIGHT; H) HEAVY LIGHT

SECTION 5, PART B

EU#5 (TK #302), EU#6 (TK #305), EU#7 (TK #308) Tier 1/Tier 2 Renewal, 10/9/06

OPERATING DATA

PERCENT FUEL CONSUMPTION PER QUARTER

DEC-FEB	25
MAR-MAY	25
JUN-AUG	25
SEP-NOV	25

OPERATING SCHEDULE

HOURS/DAY	24
DAYS/WEEK	7
WEEKS/YEAR	52

POLLUTION CONTROL EQUIPMENT

PARAMETER	PRIMARY	SECONDARY
TYPE	N/A	N/A
TYPE CODE (FROM APP. A)		
MANUFACTURER		
MODEL NUMBER		
PRESSURE DROP (IN. OF WATER)		
WET SCRUBBER FLOW (GPM)		
BAGHOUSE AIR/CLOTH RATIO (FPM)		

VENTILATION AND BUILDING/AREA DATA

ENCLOSED? (Y/N)	N/A
HOOD TYPE (FROM APP. B)	
MINIMUM FLOW (ACFM)	
PERCENT CAPTURE EFFICIENCY	
BUILDING HEIGHT (FT)	
BUILDING LENGTH (FT)	
BUILDING WIDTH (FT)	

STACK DATA

GROUND ELEVATION (FT)	N/A
UTM X COORDINATE (KM)	
UTM Y COORDINATE (KM)	
STACK TYPE (SEE NOTE BELOW)	
STACK EXIT HEIGHT FROM GROUND LEVEL (FT)	
STACK EXIT DIAMETER (FT)	
STACK EXIT GAS FLOWRATE (ACFM)	
STACK EXIT TEMPERATURE (DEG. F)	

AIR POLLUTANT EMISSIONS

POLLUTANT	CAS NUMBER	EMISSION FACTOR (SEE NOTE BELOW)	PERCENT CONTROL EFFICIENCY	ESTIMATED OR MEASURED EMISSIONS (LBS/HR)	ALLOWABLE EMISSIONS (LBS/HR)	(TONS/YR)	REFERENCE
PM							
PM-10							
SO2							
CO							
NOx							
VOC		Tanks 4.0	0	0.09	0.09	0.39	Tanks 4.0
LEAD							
Benzene	71-43-2	Tanks 4.0	0	trivial	trivial	trivial	Tanks 4.0
Xylenes (mixed isomers)	1330-20-7	Tanks 4.0	0	1.457E-03	1.457E-03	6.380E-03	Tanks 4.0
Toluene	108-88-3	Tanks 4.0	0	1.340E-03	1.340E-03	5.870E-03	Tanks 4.0
Naphthalene	91-20-3	Tanks 4.0	0	6.963E-05	6.963E-05	3.050E-04	Tanks 4.0

NOTES: STACK TYPE - 01) DOWNWARD; 02) VERTICAL (UNCOVERED); 03) VERTICAL (COVERED); 04) HORIZONTAL; 05) FUGITIVE
EMISSION FACTOR - IN LBS/UNITS. PLEASE USE SAME HOURLY UNITS GIVEN IN FUEL DATA SECTION.

SECTION 3: PROCESS AND MANUFACTURING OPERATIONS

DEQ USE ONLY

DEQ PLANT ID CODE		DEQ PROCESS CODE		DEQ STACK ID CODE	
DEQ BUILDING ID CODE		PRIMARY SCC		SECONDARY SCC	
DEQ SEGMENT CODE					

PART A: GENERAL INFORMATION

PROCESS CODE OR DESCRIPTION	EU#8, Transmix Tank Tier 1/Tier 2 Renewal, 10/9/06				
STACK DESCRIPTION	N/A				
BUILDING DESCRIPTION	N/A				
MANUFACTURER	N/A	MODEL	Cone Roof	DATE INSTALLED OR LAST MODIFIED	1950

PROCESSING DATA

PROCESS STREAM	MATERIAL DESCRIPTION	MAXIMUM HOURLY RATE	ACTUAL HOURLY RATE	ACTUAL ANNUAL RATE	UNITS
INPUT	Gasoline	65,100			gal
PRODUCT OUTPUT	Gasoline	65,100			gal
WASTE OUTPUT					
RECYCLE					

POTENTIAL HAPS IN PROCESSING STREAMS

PS DESCRIPTION	HAP CAS NUMBER	FRACTION IN INPUT STREAM BY WEIGHT	FRACTION IN PRODUCT STREAM BY WEIGHT	FRACTION IN WASTE STREAM BY WEIGHT	FRACTION IN RECYCLE STREAM BY WEIGHT
Benzene	71-43-2	0-.04250	0-.04250		
Hexane	110-54-3	0-.0350	0-.0350		
Xylenes (mixed isomers)	1330-20-7	0-.1777	0-.1777		
Toluene	108-88-3	0-.2180	0-.2180		
Ethylbenzene	100-41-4	0-.02860	0-.02860		
Naphthalene	91-20-3	0-.0064	0-.0064		
Trimethylpentane (2,2,4)	540-84-1	0-.08432	0-.08432		
Isopropyl Benzene	98-82-8	0-.0025	0-.0025		

SECTION 5: STORAGE AND HANDLING OF LIQUID SOLVENTS & OTHER VOLATILE COMPOUNDS

DEQ USE ONLY

DEQ PLANT ID CODE		DEQ PROCESS CODE		DEQ STACK ID CODE	
DEQ BUILDING ID CODE		PRIMARY SCC		SECONDARY SCC	
DEQ SEGMENT CODE					

PART A: GENERAL INFORMATION

PROCESS CODE OR DESCRIPTION	EU#8, Transmix Tank Tier 1/Tier 2 Renewal, 10/9/06
STACK DESCRIPTION	N/A
BUILDING DESCRIPTION	N/A
DATE INSTALLED OR LAST MODIFIED	1950

GENERAL TANK AND MATERIAL HANDLING DATA

MATERIAL DESCRIPTION	Gasoline		
TANK CAPACITY (GALLONS)	3,808	ANNUAL THROUGHPUT (GALLONS)	38,080
TANK TYPE	1	SOURCE	5

PLEASE CHOOSE FROM BELOW
(01) FIXED ROOF;
(02) FLOATING ROOF (OR INTERNAL COVER);
(03) VARIABLE VAPOR SPACE;
(04) PRESSURE TANK;
(05) UNDERGROUND - SPLASH LOADING;
(06) OTHER

PLEASE CHOOSE FROM BELOW
(01) PIPELINE;
(02) RAIL CAR;
(03) TANK TRUCK;
(04) SHIP BARGE;
(05) OTHER: Facility sump, vaccum truck

ADDITIONAL VAPOR PHASE DEGREASING DATA

MANUFACTURER OF DEGREASING AGENT	N/A	TANK SURFACE AREA (SQ. FT)	See Tanks 4.0
TEMPERATURE OF DEGREASING AGENT IN TANK (DEG. F)	N/A	METHOD OF VAPOR RECOVERY	6

Please choose from below:
(01) Incineration;
(02) Refrigerated Liquid Scrubber;
(03) Refrigerated Condenser;
(04) Carbon Adsorption;
(05) Vapor Return System;
(06) No Recovery System;
(07) Other

ADDITIONAL MATERIAL HANDLING DATA

PHYSICAL STATE (SEE NOTE BELOW)	L	NUMBER OF PUMP SEALS	0	NUMBER OF COMPRESSOR SEALS	0	NUMBER OF IN-LINE VALVES	2
NUMBER OF SAFETY RELIEF VALVES	0	NUMBER OF FLANGES	4	NUMBER OF OPEN-ENDED LINES	0	NUMBER OF SAMPLING CONNECTIONS	2

MATERIAL DATA

HAP DESCRIPTION	HAP CAS NUMBER	HAP FRACTION IN MATERIAL BY WEIGHT
Benzene	71-43-2	0-.04250
Hexane	110-54-3	0-.0350
Xylenes (mixed isomers)	1330-20-7	0-.1777
Toluene	108-88-3	0-.2180
Ethylbenzene	100-41-4	0-.02860
Naphthalene	91-20-3	0-.0064
Trimethylpentane (2,2,4)	540-84-1	0-.08432
sopropyl Benzene	98-82-8	0-.0025

NOTE: PHYSICAL STATE - V) VAPOR LIGHT; L) LIQUID LIGHT; H) HEAVY LIGHT

SECTION 5, PART B

EU#8, Transmix Tank Tier 1/Tier 2 Renewal, 10/9/06

OPERATING DATA

PERCENT FUEL CONSUMPTION PER QUARTER

DEC-FEB	25
MAR-MAY	25
JUN-AUG	25
SEP-NOV	25

OPERATING SCHEDULE

HOURS/DAY	24
DAYS/WEEK	7
WEEKS/YEAR	52

POLLUTION CONTROL EQUIPMENT

PARAMETER	PRIMARY	SECONDARY
TYPE	N/A	N/A
TYPE CODE (FROM APP. A)		
MANUFACTURER		
MODEL NUMBER		
PRESSURE DROP (IN. OF WATER)		
WET SCRUBBER FLOW (GPM)		
BAGHOUSE AIR/CLOTH RATIO (FPM)		

VENTILATION AND BUILDING/AREA DATA

ENCLOSED? (Y/N)	N/A
HOOD TYPE (FROM APP. B)	
MINIMUM FLOW (ACFM)	
PERCENT CAPTURE EFFICIENCY	
BUILDING HEIGHT (FT)	
BUILDING LENGTH (FT)	
BUILDING WIDTH (FT)	

STACK DATA

GROUND ELEVATION (FT)	N/A
UTM X COORDINATE (KM)	
UTM Y COORDINATE (KM)	
STACK TYPE (SEE NOTE BELOW)	
STACK EXIT HEIGHT FROM GROUND LEVEL (FT)	
STACK EXIT DIAMETER (FT)	
STACK EXIT GAS FLOWRATE (ACFM)	
STACK EXIT TEMPERATURE (DEG. F)	

AIR POLLUTANT EMISSIONS

POLLUTANT	CAS NUMBER	EMISSION FACTOR (SEE NOTE BELOW)	PERCENT CONTROL EFFICIENCY	ESTIMATED OR MEASURED EMISSIONS (LBS/HR)	ALLOWABLE EMISSIONS (LBS/HR)	ALLOWABLE EMISSIONS (TONS/YR)	REFERENCE
PM							
PM-10							
SO2							
CO							
NOx							
VOC		Tanks 4.0	0	0.06	0.06	0.27	Tanks 4.0
LEAD							
Benzene	71-43-2	Tanks 4.0	0	3.345E-04	3.345E-04	1.465E-03	Tanks 4.0
Hexane	110-54-3	Tanks 4.0	0	5.388E-04	5.388E-04	2.360E-03	Tanks 4.0
Xylenes (mixed isomers)	1330-20-7	Tanks 4.0	0	1.404E-04	1.404E-04	6.150E-04	Tanks 4.0
Toluene	108-88-3	Tanks 4.0	0	4.692E-04	4.692E-04	2.055E-03	Tanks 4.0
Ethylbenzene	100-41-4	Tanks 4.0	0	3.082E-05	3.082E-05	1.350E-04	Tanks 4.0
Naphthalene	91-20-3	Tanks 4.0	0	trivial	trivial	trivial	Tanks 4.0
Trimethylpentane (2,2,4)	540-84-1	Tanks 4.0	0	1.347E-04	1.347E-04	5.900E-04	Tanks 4.0
Isopropyl Benzene	98-82-8	Tanks 4.0	0	1.142E-06	1.142E-06	5.000E-06	Tanks 4.0

NOTES: STACK TYPE - 01) DOWNWARD; 02) VERTICAL (UNCOVERED); 03) VERTICAL (COVERED); 04) HORIZONTAL; 05) FUGITIVE
EMISSION FACTOR - IN LBS/UNITS. PLEASE USE SAME HOURLY UNITS GIVEN IN FUEL DATA SECTION.

SECTION 3: PROCESS AND MANUFACTURING OPERATIONS

DEQ USE ONLY

DEQ PLANT ID CODE		DEQ PROCESS CODE		DEQ STACK ID CODE	
BUILDING ID CODE		PRIMARY SCC		SECONDARY SCC	
DEQ SEGMENT CODE					

PART A: GENERAL INFORMATION

PROCESS CODE OR DESCRIPTION	EU#9 , Prover Tank Tier 1/Tier 2 Renewal, 10/9/06
STACK DESCRIPTION	N/A
BUILDING DESCRIPTION	N/A

MANUFACTURER	N/A	MODEL	Cone Roof	DATE INSTALLED OR LAST MODIFIED	1950

PROCESSING DATA

PROCESS STREAM	MATERIAL DESCRIPTION	MAXIMUM HOURLY RATE	ACTUAL HOURLY RATE	ACTUAL ANNUAL RATE	UNITS
INPUT	Gasoline	65,100			gal
PRODUCT OUTPUT	Gasoline	65,100			gal
WASTE OUTPUT					
RECYCLE					

POTENTIAL HAPS IN PROCESSING STREAMS

SCRIPTION	HAP CAS NUMBER	FRACTION IN INPUT STREAM BY WEIGHT	FRACTION IN PRODUCT STREAM BY WEIGHT	FRACTION IN WASTE STREAM BY WEIGHT	FRACTION IN RECYCLE STREAM BY WEIGHT
Benzene	71-43-2	0-.04250	0-.04250		
Hexane	110-54-3	0-.0350	0-.0350		
Xylenes (mixed isomers)	1330-20-7	0-.1777	0-.1777		
Toluene	108-88-3	0-.2180	0-.2180		
Ethylbenzene	100-41-4	0-.02860	0-.02860		
Naphthalene	91-20-3	0-.0064	0-.0064		
Trimethylpentane (2,2,4)	540-84-1	0-.08432	0-.08432		
Isopropyl Benzene	98-82-8	0-.0025	0-.0025		

SECTION 5: STORAGE AND HANDLING OF LIQUID SOLVENTS & OTHER VOLATILE COMPOUNDS

DEQ USE ONLY

DEQ PLANT ID CODE		DEQ PROCESS CODE		DEQ STACK ID CODE	
DEQ BUILDING ID CODE		PRIMARY SCC		SECONDARY SCC	
DEQ SEGMENT CODE					

PART A: GENERAL INFORMATION

PROCESS CODE OR DESCRIPTION: EU#9 , Prover Tank Tier 1/Tier 2 Renewal, 10/9/06

STACK DESCRIPTION: N/A

BUILDING DESCRIPTION: N/A

DATE INSTALLED OR LAST MODIFIED: 1950

GENERAL TANK AND MATERIAL HANDLING DATA

MATERIAL DESCRIPTION: Gasoline

TANK CAPACITY (GALLONS): 735

ANNUAL THROUGHPUT (GALLONS): 220,220

TANK TYPE: 1

PLEASE CHOOSE FROM BELOW
(01) FIXED ROOF;
(02) FLOATING ROOF (OR INTERNAL COVER);
(03) VARIABLE VAPOR SPACE;
(04) PRESSURE TANK;
(05) UNDERGROUND - SPLASH LOADING;
(06) OTHER

SOURCE: 5

PLEASE CHOOSE FROM BELOW
(01) PIPELINE;
(02) RAIL CAR;
(03) TANK TRUCK;
(04) SHIP BARGE;
(05) OTHER: Facility tank farm

ADDITIONAL VAPOR PHASE DEGREASING DATA

MANUFACTURER OF DEGREASING AGENT: N/A

TEMPERATURE OF DEGREASING AGENT IN TANK (DEG. F): N/A

TANK SURFACE AREA (SQ. FT): See Tanks 4.0

METHOD OF VAPOR RECOVERY: 6

Please choose from below:
(01) Incineration;
(02) Refrigerated Liquid Scrubber;
(03) Refrigerated Condenser;
(04) Carbon Adsorption;
(05) Vapor Return System;
(06) No Recovery System;
(07) Other

ADDITIONAL MATERIAL HANDLING DATA

PHYSICAL STATE (SEE NOTE BELOW)	L	NUMBER OF PUMP SEALS	0	NUMBER OF COMPRESSOR SEALS	0	NUMBER OF IN-LINE VALVES	2
NUMBER OF SAFETY RELIEF VALVES	0	NUMBER OF FLANGES	6	NUMBER OF OPEN-ENDED LINES	0	NUMBER OF SAMPLING CONNECTIONS	0

MATERIAL DATA

HAP DESCRIPTION	HAP CAS NUMBER	HAP FRACTION IN MATERIAL BY WEIGHT
Benzene	71-43-2	0-.04250
Hexane	110-54-3	0-.0350
Xylenes (mixed isomers)	1330-20-7	0-.1777
Toluene	108-88-3	0-.2180
Ethylbenzene	100-41-4	0-.02860
Naphthalene	91-20-3	0-.0064
Trimethylpentane (2,2,4)	540-84-1	0-.08432
Isopropyl Benzene	98-82-8	0-.0025

NOTE: PHYSICAL STATE - V) VAPOR LIGHT; L) LIQUID LIGHT; H) HEAVY LIGHT

SECTION 5, PART B

EU#9 , Prover Tank Tier 1/Tier 2 Renewal, 10/9/06

OPERATING DATA

PERCENT FUEL CONSUMPTION PER QUARTER

DEC-FEB	25
MAR-MAY	25
JUN-AUG	25
SEP-NOV	25

OPERATING SCHEDULE

HOURS/DAY	24
DAYS/WEEK	7
WEEKS/YEAR	52

POLLUTION CONTROL EQUIPMENT

PARAMETER	PRIMARY	SECONDARY
TYPE	N/A	N/A
TYPE CODE (FROM APP. A)		
MANUFACTURER		
MODEL NUMBER		
PRESSURE DROP (IN. OF WATER)		
WET SCRUBBER FLOW (GPM)		
BAGHOUSE AIR/CLOTH RATIO (FPM)		

VENTILATION AND BUILDING/AREA DATA

ENCLOSED? (Y/N)	N/A
HOOD TYPE (FROM APP. B)	
MINIMUM FLOW (ACFM)	
PERCENT CAPTURE EFFICIENCY	
BUILDING HEIGHT (FT)	
BUILDING LENGTH (FT)	
BUILDING WIDTH (FT)	

STACK DATA

GROUND ELEVATION (FT)	N/A
UTM X COORDINATE (KM)	
UTM Y COORDINATE (KM)	
STACK TYPE (SEE NOTE BELOW)	
STACK EXIT HEIGHT FROM GROUND LEVEL (FT)	
STACK EXIT DIAMETER (FT)	
STACK EXIT GAS FLOWRATE (ACFM)	
STACK EXIT TEMPERATURE (DEG. F)	

AIR POLLUTANT EMISSIONS

POLLUTANT	CAS NUMBER	EMISSION FACTOR (SEE NOTE BELOW)	PERCENT CONTROL EFFICIENCY	ESTIMATED OR MEASURED EMISSIONS (LBS/HR)	ALLOWABLE EMISSIONS (LBS/HR)	(TONS/YR)	REFERENCE
PM							
PM-10							
SO2							
CO							
NOx							
VOC		Tanks 4.0	0	0.06	0.06	0.26	Tanks 4.0
LEAD							
Benzene	71-43-2	Tanks 4.0	0	3.139E-04	3.139E-04	1.375E-03	Tanks 4.0
Hexane	110-54-3	Tanks 4.0	0	5.057E-04	5.057E-04	2.215E-03	Tanks 4.0
Xylenes (mixed isomers)	1330-20-7	Tanks 4.0	0	1.313E-04	1.313E-04	5.750E-04	Tanks 4.0
Toluene	108-88-3	Tanks 4.0	0	4.406E-04	4.406E-04	1.930E-03	Tanks 4.0
Ethylbenzene	100-41-4	Tanks 4.0	0	2.968E-05	2.968E-05	1.300E-04	Tanks 4.0
Naphthalene	91-20-3	Tanks 4.0	0	trivial	trivial	trivial	Tanks 4.0
Trimethylpentane (2,2,4)	540-84-1	Tanks 4.0	0	1.267E-04	1.267E-04	5.550E-04	Tanks 4.0
Isopropyl Benzene	98-82-8	Tanks 4.0	0	1.142E-06	1.142E-06	5.000E-06	Tanks 4.0

NOTES: STACK TYPE - 01) DOWNWARD; 02) VERTICAL (UNCOVERED); 03) VERTICAL (COVERED); 04) HORIZONTAL; 05) FUGITIVE
EMISSION FACTOR - IN LBS/UNITS. PLEASE USE SAME HOURLY UNITS GIVEN IN FUEL DATA SECTION.

SECTION 6: LOADING RACKS

DEQ USE ONLY

DEQ PLANT ID CODE		DEQ PROCESS CODE		DEQ STACK ID CODE	
DEQ BUILDING ID CODE		PRIMARY SCC		SECONDARY SCC	
DEQ SEGMENT CODE					

PART A: LOADING RACK DATA

PROCESS CODE OR DESCRIPTION	EU#10 , GASOLINE LOADING Tier 1/Tier 2 Renewal, 10/9/06
STACK DESCRIPTION	N/A
BUILDING DESCRIPTION	N/A

MANUFACTURER	N/A	MODEL	N/A	DATE INSTALLED OR LAST MODIFIED	1950*

TYPE OF LOADING	Bottom Loading
LOADING ARM VAPOR ENCLOSURE	None - open to air, dry brake coupler

MATERIAL LOADED	Gasoline
ANNUAL THROUGHPUT (gallons)	107.310 E 6
True Vapor Pressure (psia), annual average	4.1037
MAX. TEMP (F)	54
AVG. TEMP (F)	46

* The loading rack was converted from top loading to bottom loading in 1994-1995.
See August 3, 2000 correspondence from Sinclair to Mr. D. E. Hardesty, USEPA region 8

SECTION 6, PART B

EU#10 , GASOLINE LOADING Tier 1/Tier 2 Renewal, 10/9/06

OPERATING DATA

PERCENT FUEL CONSUMPTION PER QUARTER

DEC-FEB	25
MAR-MAY	25
JUN-AUG	25
SEP-NOV	25

OPERATING SCHEDULE

HOURS/DAY	24
DAYS/WEEK	7
WEEKS/YEAR	52

POLLUTION CONTROL EQUIPMENT

PARAMETER	PRIMARY	SECONDARY
TYPE	N/A	N/A
TYPE CODE (FROM APP. A)		
MANUFACTURER		
MODEL NUMBER		
PRESSURE DROP (IN. OF WATER)		
WET SCRUBBER FLOW (GPM)		
BAGHOUSE AIR/CLOTH RATIO (FPM)		

VENTILATION AND BUILDING/AREA DATA

ENCLOSED? (Y/N)	N/A
HOOD TYPE (FROM APP. B)	
MINIMUM FLOW (ACFM)	
PERCENT CAPTURE EFFICIENCY	
BUILDING HEIGHT (FT)	
BUILDING LENGTH (FT)	
BUILDING WIDTH (FT)	

STACK DATA

GROUND ELEVATION (FT)	4188
UTM X COORDINATE (KM)	277123
UTM Y COORDINATE (KM)	4710315
STACK TYPE (SEE NOTE BELOW)	3
STACK EXIT HEIGHT FROM GROUND LEVEL (FT)	8
STACK EXIT DIAMETER (FT)	0.5
STACK EXIT GAS FLOWRATE (ACFM)	145
STACK EXIT TEMPERATURE (DEG. F)	46 (annual avg.)

AIR POLLUTANT EMISSIONS

POLLUTANT	CAS NUMBER	EMISSION FACTOR (SEE NOTE BELOW)	PERCENT CONTROL EFFICIENCY	ESTIMATED OR MEASURED EMISSIONS (LBS/HR)	ALLOWABLE EMISSIONS (LBS/HR)	ALLOWABLE EMISSIONS (TONS/YR)	REFERENCE
PM							
PM-10							
SO2							
CO							
NOx							
VOC		AP 42	0	81.63	81.63	357.56	Tanks 4.0
LEAD							
Benzene	71-43-2	AP 42	0	4.327E-01	4.327E-01	1.895E+00	Tanks 4.0
Hexane	110-54-3	AP 42	0	7.021E-01	7.021E-01	3.075E+00	Tanks 4.0
Xylenes (mixed isomers)	1330-20-7	AP 42	0	1.796E-01	1.796E-01	7.866E-01	Tanks 4.0
Toluene	108-88-3	AP 42	0	6.123E-01	6.123E-01	2.682E+00	Tanks 4.0
Ethylbenzene	100-41-4	AP 42	0	4.082E-02	4.082E-02	1.788E-01	Tanks 4.0
Naphthalene	91-20-3	AP 42	0	4.566E-05	4.566E-05	2.000E-04	Tanks 4.0
Trimethylpentane (2,2,4)	540-84-1	AP 42	0	1.796E-01	1.796E-01	7.866E-01	Tanks 4.0
Isopropyl Benzene	98-82-8	AP 42	0	2.557E-03	2.557E-03	1.120E-02	Tanks 4.0

NOTES: STACK TYPE - 01) DOWNWARD; 02) VERTICAL (UNCOVERED); 03) VERTICAL (COVERED); 04) HORIZONTAL; 05) FUGITIVE
EMISSION FACTOR - IN LBS/UNITS. PLEASE USE SAME HOURLY UNITS GIVEN IN FUEL DATA SECTION.

SECTION 6: LOADING RACKS

DEQ USE ONLY

DEQ PLANT ID CODE		DEQ PROCESS CODE		DEQ STACK ID CODE	
DEQ BUILDING ID CODE		PRIMARY SCC		SECONDARY SCC	
DEQ SEGMENT CODE					

PART A: LOADING RACK DATA

PROCESS CODE OR DESCRIPTION	EU#10 , DISTILLATE FUEL OIL LOADING Tier 1/Tier 2 Renewal, 10/9/06
STACK DESCRIPTION	N/A
BUILDING DESCRIPTION	N/A

MANUFACTURER	N/A	MODEL	N/A	DATE INSTALLED OR LAST MODIFIED	1950*

TYPE OF LOADING	Bottom Loading
LOADING ARM VAPOR ENCLOSURE	None - open to air, dry brake coupler

MATERIAL LOADED	Distillate Fuel Oil
ANNUAL THROUGHPUT (gallons)	462.966 E 6
True Vapor Pressure (psia), annual average	0.0044
MAX. TEMP (F)	54
AVG. TEMP (F)	46

* The loading rack was converted from top loading to bottom loading in 1994-1995.
See August 3, 2000 correspondence from Sinclair to Mr. D. E. Hardesty, USEPA region 8

SECTION 6, PART B

EU#10 , DISTILLATE FUEL OIL LOADING Tier 1/Tier 2 Renewal, 10/9/06

OPERATING DATA

PERCENT FUEL CONSUMPTION PER QUARTER

DEC-FEB	25
MAR-MAY	25
JUN-AUG	25
SEP-NOV	25

OPERATING SCHEDULE

HOURS/DAY	24
DAYS/WEEK	7
WEEKS/YEAR	52

POLLUTION CONTROL EQUIPMENT

PARAMETER	PRIMARY	SECONDARY
TYPE	N/A	N/A
TYPE CODE (FROM APP. A)		
MANUFACTURER		
MODEL NUMBER		
PRESSURE DROP (IN. OF WATER)		
WET SCRUBBER FLOW (GPM)		
BAGHOUSE AIR/CLOTH RATIO (FPM)		

VENTILATION AND BUILDING/AREA DATA

ENCLOSED? (Y/N)	N/A
HOOD TYPE (FROM APP. B)	
MINIMUM FLOW (ACFM)	
PERCENT CAPTURE EFFICIENCY	
BUILDING HEIGHT (FT)	
BUILDING LENGTH (FT)	
BUILDING WIDTH (FT)	

STACK DATA

GROUND ELEVATION (FT)	4188
UTM X COORDINATE (KM)	277123
UTM Y COORDINATE (KM)	4710315
STACK TYPE (SEE NOTE BELOW)	3
STACK EXIT HEIGHT FROM GROUND LEVEL (FT)	8
STACK EXIT DIAMETER (FT)	0.5
STACK EXIT GAS FLOWRATE (ACFM)	131
STACK EXIT TEMPERATURE (DEG. F)	46 (annual avg.)

AIR POLLUTANT EMISSIONS

POLLUTANT	CAS NUMBER	EMISSION FACTOR (SEE NOTE BELOW)	PERCENT CONTROL EFFICIENCY	ESTIMATED OR MEASURED EMISSIONS (LBS/HR)	ALLOWABLE EMISSIONS (LBS/HR)	ALLOWABLE EMISSIONS (TONS/YR)	REFERENCE
PM							
PM-10							
SO2							
CO							
NOx							
VOC		AP 42	0	0.74	0.74	3.26	AP 42
LEAD							
Benzene	71-43-2	AP 42	0	trivial	trivial	trivial	AP 42
Xylenes (mixed isomers)	1330-20-7	AP 42	0	1.217E-02	1.217E-02	5.330E-02	AP 42
Toluene	108-88-3	AP 42	0	1.114E-02	1.114E-02	4.880E-02	AP 42
Naphthalene	91-20-3	AP 42	0	5.936E-04	5.936E-04	2.600E-03	AP 42

NOTES: STACK TYPE - 01) DOWNWARD; 02) VERTICAL (UNCOVERED); 03) VERTICAL (COVERED); 04) HORIZONTAL; 05) FUGITIVE
EMISSION FACTOR - IN LBS/UNITS. PLEASE USE SAME HOURLY UNITS GIVEN IN FUEL DATA SECTION.

SECTION 6: FUGITIVE EMISSIONS

DEQ USE ONLY

DEQ PLANT ID CODE		DEQ PROCESS CODE		DEQ STACK ID CODE	
DEQ BUILDING ID CODE		PRIMARY SCC		SECONDARY SCC	
DEQ SEGMENT CODE					

PART A: LOADING RACK DATA

PROCESS CODE OR DESCRIPTION	EU#11 , FUGITIVE EMISSIONS Tier 1/Tier 2 Renewal, 10/9/06
STACK DESCRIPTION	N/A
BUILDING DESCRIPTION	N/A

MANUFACTURER	N/A	MODEL	N/A	DATE INSTALLED OR LAST MODIFIED	1950

MATERIAL TRANSFERRED	Gasoline, Distillate Fuel Oil
ANNUAL THROUGHPUT (gallons)	N/A

SECTION 6, PART B

EU#11 , FUGITIVE EMISSIONS Tier 1/Tier 2 Renewal, 10/9/06

OPERATING DATA

PERCENT FUEL CONSUMPTION PER QUARTER

DEC-FEB	25
MAR-MAY	25
JUN-AUG	25
SEP-NOV	25

OPERATING SCHEDULE

HOURS/DAY	24
DAYS/WEEK	7
WEEKS/YEAR	52

POLLUTION CONTROL EQUIPMENT

PARAMETER	PRIMARY	SECONDARY
TYPE	N/A	N/A
TYPE CODE (FROM APP. A)		
MANUFACTURER		
MODEL NUMBER		
PRESSURE DROP (IN. OF WATER)		
WET SCRUBBER FLOW (GPM)		
BAGHOUSE AIR/CLOTH RATIO (FPM)		

VENTILATION AND BUILDING/AREA DATA

ENCLOSED? (Y/N)	N/A
HOOD TYPE (FROM APP. B)	
MINIMUM FLOW (ACFM)	
PERCENT CAPTURE EFFICIENCY	
BUILDING HEIGHT (FT)	
BUILDING LENGTH (FT)	
BUILDING WIDTH (FT)	

STACK DATA

GROUND ELEVATION (FT)	N/A
UTM X COORDINATE (KM)	
UTM Y COORDINATE (KM)	
STACK TYPE (SEE NOTE BELOW)	
STACK EXIT HEIGHT FROM GROUND LEVEL (FT)	
STACK EXIT DIAMETER (FT)	
STACK EXIT GAS FLOWRATE (ACFM)	
STACK EXIT TEMPERATURE (DEG. F)	

AIR POLLUTANT EMISSIONS

POLLUTANT	CAS NUMBER	EMISSION FACTOR (SEE NOTE BELOW)	PERCENT CONTROL EFFICIENCY	ESTIMATED OR MEASURED EMISSIONS (LBS/HR)	ALLOWABLE EMISSIONS (LBS/HR)	(TONS/YR)	REFERENCE
PM							
PM-10							
SO2							
CO							
NOx							
VOC		EPA-453/R-95-017	0	0.28	0.28	1.24	EPA-453/R-95-017
LEAD							
Benzene	71-43-2	EPA-453/R-95-017	0	4.772E-03	4.772E-03	2.090E-02	EPA-453/R-95-017
Hexane	110-54-3	EPA-453/R-95-017	0	4.589E-03	4.589E-03	2.010E-02	EPA-453/R-95-017
Xylenes (mixed isomers)	1330-20-7	EPA-453/R-95-017	0	3.167E-02	3.167E-02	1.387E-01	EPA-453/R-95-017
Toluene	108-88-3	EPA-453/R-95-017	0	2.470E-02	2.470E-02	1.082E-01	EPA-453/R-95-017
Ethylbenzene	100-41-4	EPA-453/R-95-017	0	5.251E-03	5.251E-03	2.300E-02	EPA-453/R-95-017
Naphthalene	91-20-3	EPA-453/R-95-017	0	3.196E-04	3.196E-04	1.400E-03	EPA-453/R-95-017
Trimethylpentane (2,2,4)	540-84-1	EPA-453/R-95-017	0	3.836E-03	3.836E-03	1.680E-02	EPA-453/R-95-017
Isopropyl Benzene	98-82-8	EPA-453/R-95-017	0	5.479E-04	5.479E-04	2.400E-03	EPA-453/R-95-017

NOTES: STACK TYPE - 01) DOWNWARD; 02) VERTICAL (UNCOVERED); 03) VERTICAL (COVERED); 04) HORIZONTAL; 05) FUGITIVE
EMISSION FACTOR - IN LBS/UNITS. PLEASE USE SAME HOURLY UNITS GIVEN IN FUEL DATA SECTION.

SECTION 6: SOIL VAPOR EXTRACTION SYSTEM

DEQ USE ONLY

DEQ PLANT ID CODE		DEQ PROCESS CODE		DEQ STACK ID CODE	
DEQ BUILDING ID CODE		PRIMARY SCC		SECONDARY SCC	
DEQ SEGMENT CODE					

PART A: SOIL VAPOR EXTRACTION SYSTEM DATA

PROCESS CODE OR DESCRIPTION	SOIL VAPOR EXTRACTION SYSTEM Tier 1/Tier 2 Renewal, 10/9/06				
STACK DESCRIPTION	See Section 6, Part B				
BUILDING DESCRIPTION	N/A				
MANUFACTURER	N/A (Custom Design)	MODEL	N/A	DATE INSTALLED OR LAST MODIFIED	2003
TYPE OF UNIT	Soil Vapor Extraction System				
	N/A				

MATERIAL VENTED	Hydrocarbon Vapors from Soil
VENT FLOWRATE (CFM)	500 (Nominial)
True Vapor Pressure (psia), annual average	N/A
MAX. TEMP (F)	Ambient
AVG. TEMP (F)	Ambient

SECTION 6, PART B

SOIL VAPOR EXTRACTION SYSTEM Tier 1/Tier 2 Renewal, 10/9/06

OPERATING DATA

PERCENT FUEL CONSUMPTION PER QUARTER

DEC-FEB	25
MAR-MAY	25
JUN-AUG	25
SEP-NOV	25

OPERATING SCHEDULE

HOURS/DAY	24
DAYS/WEEK	7
WEEKS/YEAR	52

POLLUTION CONTROL EQUIPMENT

PARAMETER	PRIMARY	SECONDARY
TYPE	N/A	N/A
TYPE CODE (FROM APP. A)		
MANUFACTURER		
MODEL NUMBER		
PRESSURE DROP (IN. OF WATER)		
WET SCRUBBER FLOW (GPM)		
BAGHOUSE AIR/CLOTH RATIO (FPM)		

VENTILATION AND BUILDING/AREA DATA

ENCLOSED? (Y/N)	N/A
HOOD TYPE (FROM APP. B)	
MINIMUM FLOW (ACFM)	
PERCENT CAPTURE EFFICIENCY	
BUILDING HEIGHT (FT)	
BUILDING LENGTH (FT)	
BUILDING WIDTH (FT)	

STACK DATA

GROUND ELEVATION (FT)	4188
UTM X COORDINATE (KM)	277130
UTM Y COORDINATE (KM)	4710400
STACK TYPE (SEE NOTE BELOW)	2
STACK EXIT HEIGHT FROM GROUND LEVEL (FT)	20
STACK EXIT DIAMETER (FT)	0.33
STACK EXIT GAS FLOWRATE (ACFM)	500 (nominal)
STACK EXIT TEMPERATURE (DEG. F)	ambient (annual avg.)

AIR POLLUTANT EMISSIONS

POLLUTANT	CAS NUMBER	EMISSION FACTOR (SEE NOTE BELOW)	PERCENT CONTROL EFFICIENCY	ESTIMATED OR MEASURED EMISSIONS (LBS/HR)	ALLOWABLE EMISSIONS (LBS/HR)	ALLOWABLE EMISSIONS (TONS/YR)	REFERENCE
PM							
PM-10							
SO2							
CO							
NOx							
VOC		see reference	0	2.06	2.06	9.02	10/14/04 PTC Exemption
LEAD							
Benzene	71-43-2	see reference	0	3.75E-03	3.75E-03	1.64E-02	10/14/04 PTC Exemption
Hexane	110-54-3	see reference	0	6.08E-03	6.08E-03	2.67E-02	see reference note
Xylenes (mixed isomers)	1330-20-7	see reference	0	1.56E-03	1.56E-03	6.82E-03	see reference note
Toluene	108-88-3	see reference	0	5.31E-03	5.31E-03	2.32E-02	see reference note
Ethylbenzene	100-41-4	see reference	0	3.54E-04	3.54E-04	1.55E-03	see reference note
Naphthalene	91-20-3	see reference	0	3.96E-07	3.96E-07	1.73E-06	see reference note
Trimethylpentane (2,2,4)	540-84-1	see reference	0	1.56E-03	1.56E-03	6.82E-03	see reference note
Isopropyl Benzene	98-82-8	see reference	0	2.22E-05	2.22E-05	9.71E-05	see reference note

reference note: Non-benzene HAP emissions are estimated from HAP/benzene ratio of gasoline and are not permitted allowable emissions.

NOTES: STACK TYPE - 01) DOWNWARD; 02) VERTICAL (UNCOVERED); 03) VERTICAL (COVERED); 04) HORIZONTAL; 05) FUGITIVE

EMISSION FACTOR - IN LBS/UNITS. PLEASE USE SAME HOURLY UNITS GIVEN IN FUEL DATA SECTION.

3.0 GENERAL INFORMATION FOR THE FACILITY

3.1 General Description of Facility

The Sinclair Burley Products Terminal receives, stores and distributes petroleum products. The facility was constructed in 1950 and receives petroleum products from the Chevron pipeline (which originates in Salt Lake City, Utah) and stores the petroleum products on-site in any of seven petroleum product storage tanks. There is also one transmix storage tank which is used to store "slop oil" and one prover tank which is used for flow meter calibration. From tankage, the petroleum products are dispensed into carriers, primarily tank trucks, through a two bay loading rack system. Various additives may be blended with the petroleum products prior to dispensing. The carrier then distributes the petroleum products to gas stations, truck stops, airports, farms, etc.

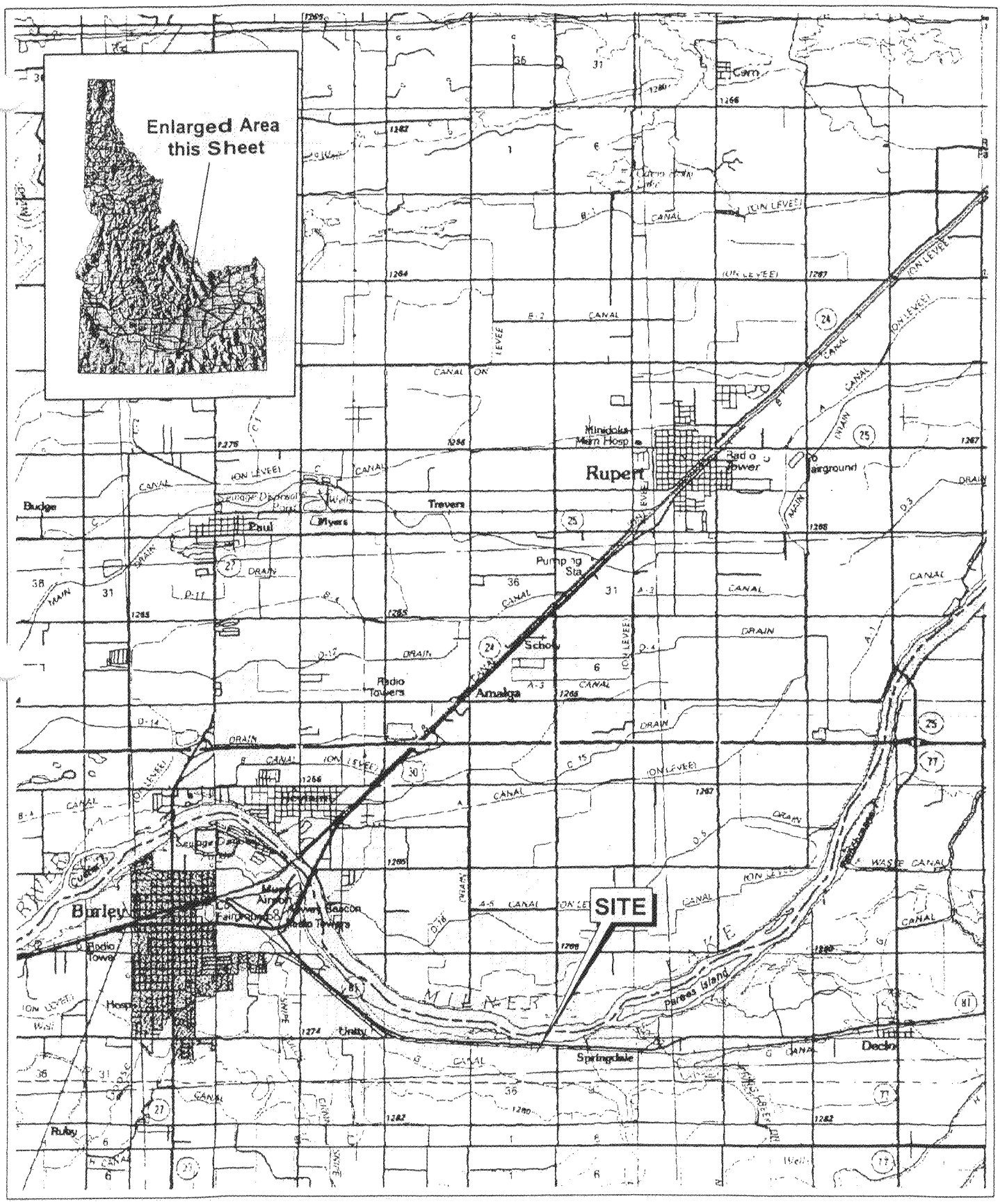
The Sinclair Burley Products Terminal also has installed a Soil Vapor Extraction (SVE) system to remove hydrocarbons from contaminated soil at various locations by the facility.

3.2 Location of Facility

The Burley Products Terminal is located in south central Idaho at 425 East Highway 81 in Burley, Idaho as shown in Figure 3-1. A plot plan of the facility showing the Tier 1 emission sources is provided in Figure 3-2.

3.3 Description of Product Flow

This section describes the flow of petroleum products through the terminal. As shown in the Process Flow Diagram (re: Figure 3-3), petroleum products enter the facility from the pipeline and are directed to the tank farm for storage. The tank farm consists of four gasoline storage tanks, three distillate oil storage tanks and a transmix storage tank. The four gasoline storage tanks are external floating roof type and may be used to store any grade of gasoline (ie. regular unleaded, premium unleaded, etc.) as well as lower vapor pressure petroleum products. The three distillate oil storage tanks are fixed roof type and may be used to store any grade of distillate fuel oil (ie. #2 fuel oil, #1 fuel oil, etc.). The transmix storage tank is fixed roof type and is used to store any grade of gasoline as well as lower vapor pressure petroleum products. The contents of the transmix tank are evacuated with a vacuum truck.



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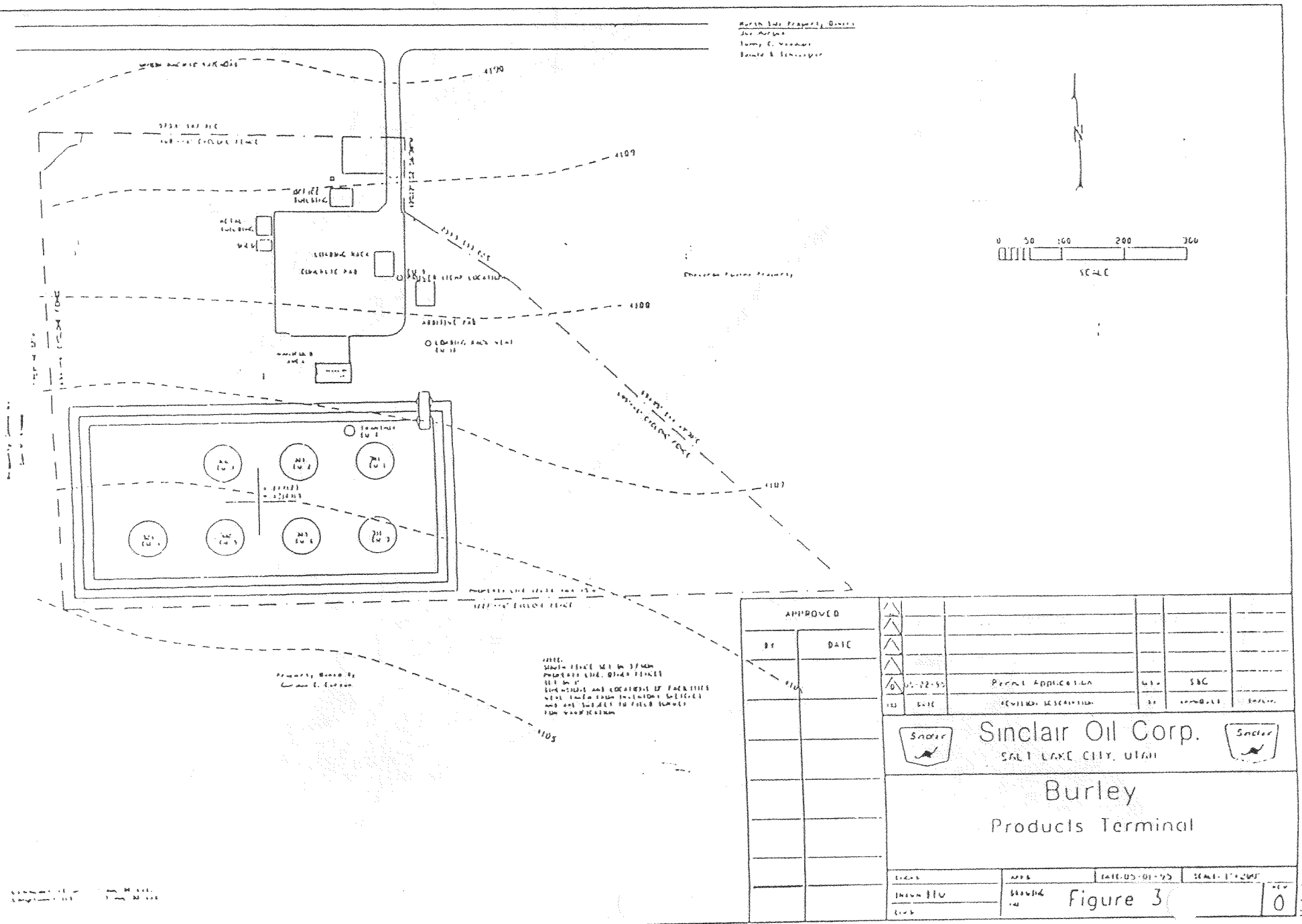
MAXIM TECHNOLOGIES INC. 1540036.400

Vicinity Map
Burley Terminal Operators
Burley, Idaho
FIGURE 3.1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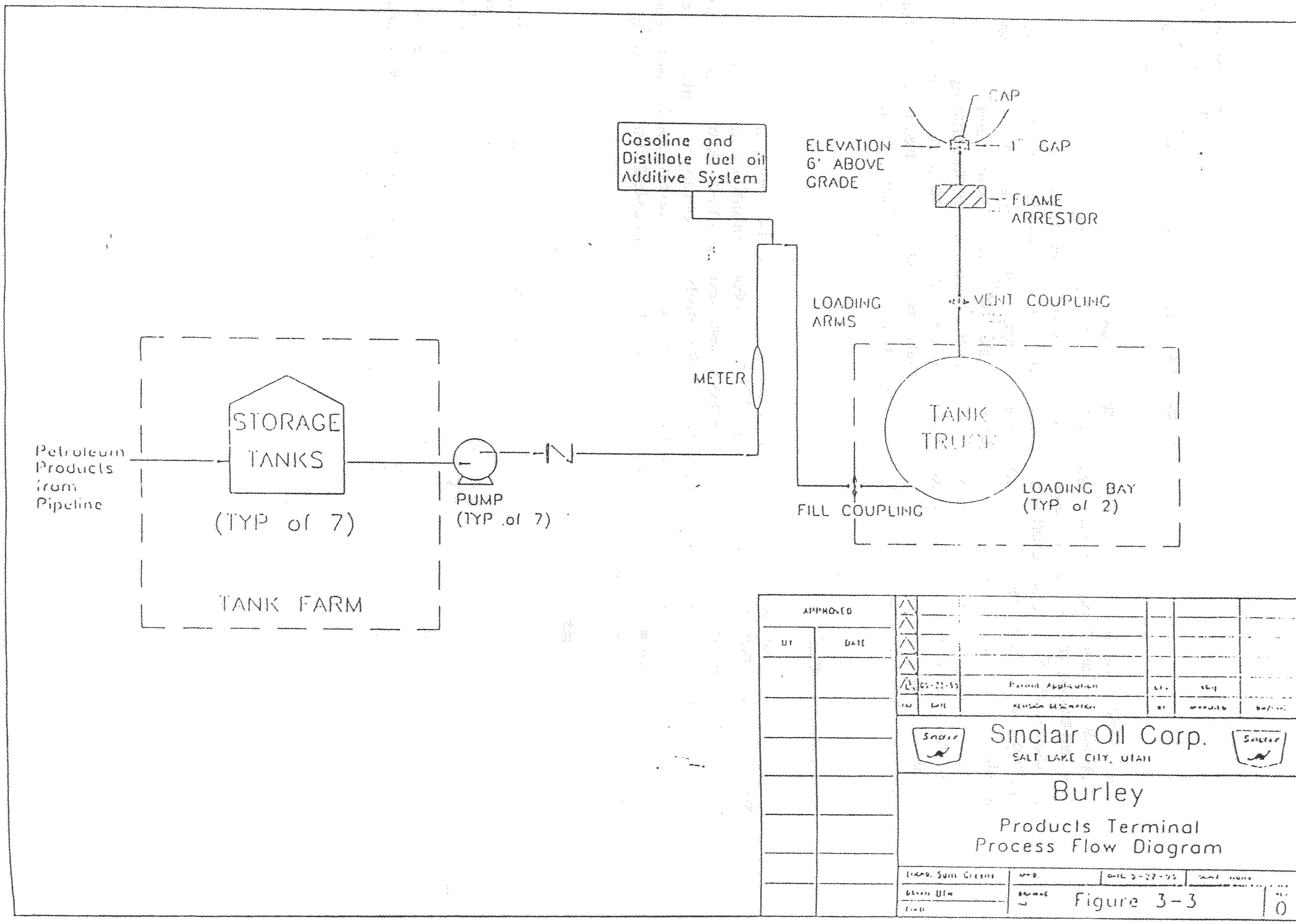
SCALE
APPROVED
BY
DATE
Sinclair Oil Corp.
SALT LAKE CITY, UTAH
Burley
Products Terminal
Figure 3
0



Gasoline and Distillate fuel oil Additive System
CAP
ELEVATION 6' ABOVE GRADE
1" GAP
FLAME ARRESTOR
VENT COUPLING
LOADING ARMS
METER
TANK TRUCK
Petroleum Products from Pipeline
STORAGE TANKS
(TYP of 7)
TANK FARM
PUMP (TYP of 7)
FILL COUPLING
LOADING BAY (TYP of 2)
APPROVED
BY
DATE
Permit Application
REVISION DESCRIPTION
Sinclair Oil Corp.
SALT LAKE CITY, UTAH
Burley
Products Terminal
Process Flow Diagram
Figure 3-3
0

The facility is equipped with a two bay, bottom loading rack system for loading petroleum products into tank trucks or other type carriers. When a carrier arrives at the facility, it is directed to one of the loading rack bays where one (or several) of the loading rack arms are attached. Petroleum products are pumped from the tank farm to the loading rack system via a manifolded piping/pump arrangement. Various gasoline and distillate oil additives may be blended into the petroleum products via an in-line blending system. During the filling operation, displaced vapors from the carrier are vented through the vapor collection system and are discharged to atmosphere. Filling of the carrier continues until the desired quantity of product has been transferred. Upon completion of the filling operation, the carrier is disconnected from the loading rack system and exits the facility.

3.4 Calibration of Flowmeters

Periodic calibration of the petroleum products Flowmeters located at the loading rack system is required to ensure accuracy of the inventory control system. Flowmeter calibration is performed by metering a quantity of petroleum product into the Prover Tank, which has a known volume. Comparison of the metered volume of product by the flowmeter with the volume of product transferred to the Prover Tank allows for verification of flowmeter accuracy. If necessary, the flowmeter may be adjusted in order to bring its accuracy within acceptable limits.

3.5 Soil Vapor Extraction System

The Soil Vapor Extraction (SVE) system was installed to remove hydrocarbons from contaminated soil at various locations by the facility. The SVE system was installed under a Permit to Construct Exemption granted by the Division on February 18, 2004 (revised on October 14, 2004). Because the SVE system was exempt from construction permitting and there are no monitoring, recordkeeping and reporting requirements in the Permit to Construction Exemption, Sinclair believes there are no new requirements that need to be incorporated into the Tier 1 and Tier 2 permits regarding the SVE system.

4.0 EXCESS EMISSIONS PROCEDURES

This section provides a description of excess emissions that may occur as a result of startup, shutdown or maintenance activities. The potential emissions from this facility are based upon the allowable petroleum product throughput. Because there are no air pollution control devices associated with this facility, maximum emissions occur when the facility operates at the maximum petroleum product throughput condition. When the facility is being started up or shut down, less than the maximum potential emissions will be released. Therefore no excess emissions due to startup or shut down occur.

The following events have been defined as maintenance activities at this facility:

- Pipe cleaning
- Pipe pressure testing
- Replacement of gasket materials
- Tank cleaning (including grit blasting and water washing)
- Instrument maintenance
- Pump maintenance (including disassembly of pumps)

The release of emissions during maintenance activities will be minimized by utilizing standard maintenance practices for the petroleum industry.

Maintenance activities are non routine and occur on an as needed basis, therefore the frequency of these activities can not be defined. Because of their infrequent nature, the emissions resulting from maintenance activities are considered insignificant.

5.0 EMISSIONS UNIT INFORMATION

This section provides specific information for each Emissions Unit (EU) which is not an insignificant activity.

5.1 Emissions from Emissions Units

Potential air emissions and the analogous product throughputs from the indicated EUs are listed in Chapter 2.0 (re: Storage tanks see DEQ forms Sections 3: Process and Manufacturing Information and Section 5: Storage and Handling of Liquid Solvents and Other Volatile Compounds; Loading rack see DEQ form Sections 6: Loading Racks) and in Appendix: C Fugitive Emissions Calculations.

A summary of maximum potential Volatile Organic Compound (VOC) emissions and Hazardous Air Pollutant (HAP) emissions from each EU and the total from the facility is provided in Table 5.1

5.2 Description of Points of Emission / Definition of Potential Emissions

This section identifies and describes the emissions units in the facility and lists the basis for the maximum potential emissions from each emissions unit.

5.2.1 External Floating Roof Storage Tanks (EU # 1, 2, 3 and 4):

Gasoline grade or distillate fuel oil grade petroleum products can be stored in these tanks. Emissions from these units are a result of standing and withdrawal losses as defined per AP-42 methodology[1]. The maximum potential emissions from any one of these tanks occurs when gasoline grade petroleum product is loaded, stored and unloaded at the defined maximum throughput. The maximum throughput for any one of these tanks is defined as the capacity of the pipeline supplying the terminal distributed to three of the four storage tanks (this assumes that one of the four storage tanks is off line for maintenance).

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[1] **Compilation of Air Pollution Factors, Volume 1 Stationary and Area Point Sources, Section 4.3. AP-42, Fourth Edition, September 1985. USEPA.**

Table 5.1 Potential Emissions Summary

EU #	Description	Maximum Potential VOC Emissions (TPY)	Maximum Potential HAP Emissions (TPY)
1	Tank 301	15.17	0.436
2	Tank 304	15.17	0.436
3	Tank 311	15.17	0.436
4	Tank 321	15.17	0.436
5	Tank 402	0.39	0.013
6	Tank 405	0.39	0.013
7	Tank 406	0.39	0.013
8	Transmix Tank	0.27	0.007
9	Prover Tank	0.26	0.007
10	Loading Rack - gasoline	357.6	9.42
10	Loading Rack - distillate oil	3.26	0.105
11	Fugitive Emissions	1.24	0.332
N/A	Soil Vapor Extraction System	9.02 (Note:1)	0.08 (Note:2)
	Total emissions	433.5	11.7

Note: 1 Per October 14, 2004 Permit to construct Waiver, Section 5.2.
Note: 2 HAP emission estimate is based on:
October 14, 2004 Permit to Construct Waiver for benzene
HAP/benzene mass fraction ratioed to gasoline for non-benzene HAP

5.2.2 Fixed Roof Tanks (EU # 5, 6 and 7):

Distillate fuel oil grade petroleum products can be stored in these tanks. Emissions from these units are a result of breathing and working losses as defined per AP-42 methodology. The maximum potential emissions from any one of these tanks occurs when distillate grade petroleum product is loaded, stored and unloaded at the defined maximum throughput. The maximum throughput for any one of these tanks is defined as the capacity of the pipeline supplying the terminal distributed to two of the three storage tanks (this assumes that one of the three storage tanks is off line for maintenance).

5.2.3 Transmix Tank (EU # 8):

The transmix storage tank is fixed roof type and is used to store "slop oil" (ie. off specification petroleum products, residual products from the other storage tanks, water contaminated with petroleum, etc.). Emissions from this unit results of breathing and working losses as defined per AP-42 methodology. The maximum potential emissions from this source occur when gasoline grade petroleum product is loaded, stored and unloaded at the defined maximum throughput.

5.2.4 Prover Tank (EU # 9):

The prover tank is fixed roof type and is used to calibrate the flowmeters in the loading rack system. Emissions from the prover tank occur when the tank is filled and the displaced vapors vent to atmosphere. The maximum potential emissions from this source occur when gasoline grade petroleum product is loaded during meter calibration testing and is dependent upon the number of calibration tests performed.

5.2.5 Loading Rack Vent (EU # 10):

Displaced vapors from carriers, as a result of dispensing product at the two bay loading rack system, are collected and discharged to atmosphere with the loading rack vent. The maximum potential emissions from this source occurs when gasoline grade and distillate grade petroleum products are dispensed at the defined maximum throughput.

5.2.6 Soil Vapor Extraction System

The Soil Vapor Extraction (SVE) system was installed to remove hydrocarbons from contaminated soil at various locations by the facility. An induced draft blower/well system collects hydrocarbon vapors present in the soil and discharges the vapors to atmosphere.

5.3 Emissions Calculations

5.3.1 Tank Emissions Calculation

Calculation of VOC emissions HAP emissions were performed using Tanks Version 4.0 software[2]. The Tanks Version 4.0 outputs for all storage tanks, the transmix storage tank

[2] **Storage Tank Emissions Calculation Software, Version 4.0. Emissions Inventory Branch, Office of Air Quality Planning and Standards. USEPA.**

and the prover tank are provided in Appendix: A.

5.3.2 Loading Rack Emissions Calculation

The potential emission calculation for the loading rack system was based upon AP-42 methodology[3]. The calculation is provided in Appendix: B.

5.3.3 Fugitive Emissions Calculation

The potential fugitive emissions calculation was based upon the Protocol for Equipment Leak Emission Estimates [4] and AP-42 methodology[5] and is provided in Appendix: C.

5.3.4 Soil Vapor Extraction System Emissions Calculation

The potential VOC emissions for the SVE system are incorporated by reference from the Division's Per October 14, 2004 Permit to construct Waiver, Section 5.2 (see Appendix D). HAP emissions were based on a HAP/VOC mass fraction of 0.029 (the same HAP/VOC fraction used for EUs 1 through 4).

5.4 Compliance Monitoring / Record Keeping

Compliance with the defined potential emission limits, as listed in Chapter 2.0, will be based upon monitoring the product throughput of the facility. The maximum product throughput limits are defined in Table 5.2.

By limiting the EU throughputs to the values listed in Table 5.2, the facility will not exceed the 25 TPY major source threshold for HAPs.

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[3] **Compilation of Air Pollution Factors, Volume 1 Stationary and Area Point Sources, Section 5.2, equation (1), AP-42, Fifth Edition, January 1995. USEPA.**

[4] **Protocol for Equipment Leak Emission Estimates (EPA-453/R-95-017), Table 2.3, USEPA.**

[5] **Compilation of Air Pollution Factors, Volume 1 Stationary and Area Point Sources, Section 9.1.3. AP-42, Fourth Edition, September 1985. USEPA.**

Table 5.2 Maximum Annual Product Throughput Limits

EU #	Description	Maximum EU Throughput (gpy)
1	Tank 301	86,359,000
2	Tank 304	86,359,000
3	Tank 311	86,359,000
4	Tank 321	86,359,000
5	Tank 302	155,599,500
6	Tank 305	155,599,500
7	Tank 306	155,599,500
8	Transmix Tank	38,080
9	Prover Tank	220,200
10	Loading Rack – gasoline	107,310,000
10	Loading Rack - distillate oil	462,996,000
N/A	Soil Vapor Extraction System	N/A

5.4.1 Storage Tank Monitoring (EU # 1 through 8)

The operator will record the quantity of product received in all storage tanks. This information will be compiled on an annual basis to determine product throughput.

5.4.2 Prover (EU # 9)

The operator will compile, on an annual basis, the volume of product transferred to the prover. This information is proportional to the number of flowmeter calibration cycles

during the year.

4.4.3 Loading Rack Monitoring (EU # 10)

The operator will record product throughputs for both bays of the loading rack system. This information will be compiled on an annual basis to determine product throughput.

5.4.4 Process Control

The year-to-date product throughput will be tracked by Sinclair and will be compared to the prorated annual maximum throughput limits. If the year-to-date throughputs are higher than the prorated annual maximum throughputs, Sinclair will make adjustments (if necessary), to ensure compliance at the end of the year.

5.5 Reporting

As currently required by Tier 1 Operating Permit No. T1-030413, Sinclair will continue to report storage tank and loading rack throughputs on an annual basis.

6.0 INSIGNIFICANT ACTIVITIES

In addition to the insignificant activities listed in IDAPA 16.01.01 Section 317, Sinclair is providing a description of emission units and activities that can be performed at the facility which are insignificant (ie. exempt) for purposes of the operating permit program. This listing provides details on selected activities and does not cover all potential insignificant activities that may occur at this facility.

6.1 Presumptively Insignificant Emissions Units

See IDAPA 16.01.01.317.01.a

6.2 Exemption Based on Size or Production Rate

See IDAPA 16.01.01.317.01.b. In addition, the following emission units and activities are exempt from the operating permit program based upon size or production rate.

6.2.1 Petroleum Product Additives

All gasoline additive and distillate fuel oil additive storage, loading and unloading operations at this facility are exempt per IDAPA 16.01.01.317.01.b.i(3): Operation, loading and unloading of VOC storage tanks (including gasoline storage tanks), ten thousand (10,000) gallons capacity or less, with lids or other appropriate closure, vapor pressure not greater than 80 mm Hg at 21 °C. In addition, any fugitive emissions from the additive system are insignificant.

6.2.2 Petroleum Product Sampling

All petroleum product sampling activities at this facility are exempt per IDAPA 16.01.01.317.01.b.i(1): Operation, loading and unloading of VOC storage tanks and storage vessels, with lids or other appropriate closure and less than two hundred sixty (260) gallon capacity (35 ft^3), heated only to the minimum extent to avoid solidification if necessary.

6.2.3 Maintenance Activities

Maintenance activities as listed in Chapter 4.0 are defined as insignificant due to their infrequent nature.

7.0 REGULATORY REQUIREMENTS

This section describes the applicable and some of the non-applicable regulatory requirements for this facility.

7.1 Applicable Regulatory Requirement

The only applicable regulatory requirement affecting this facility is listed in IDAPA 16 Title 1 Chapter 1 Sections 525 through 538. These sections establish the criteria for registration of emissions and the payment of fees for Tier 1 facilities. These fees are based on actual annual emissions from the facility.

7.2 Non-Applicable Regulatory Requirements

There are numerous regulatory requirements which do not apply to this facility and to list them all would be a tedious task with minimal benefit. There are regulatory requirements which may apply to other petroleum products storage and distribution facilities which do not apply to this facility. This section lists these non-applicable regulatory requirements for this facility in an effort to illustrate the comprehensive regulatory research undertaken for this permit application. A brief discussion of the basis for non-applicability of these requirements is included.

7.2.1 Standards of Performance for New Stationary Sources (NSPS):

Subpart K - Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction or Modification Commenced After June 11, 1973, and prior to May 19, 1978 does not apply because this facility was constructed or last modified prior to the applicability date.

Subpart Ka - Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction or Modification Commenced After May 18 1978, and prior to July 23, 1984 does not apply because this facility was constructed or last modified prior to the applicability date.

Subpart Kb - Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction or Modification Commenced After July 23, 1984 does not apply because this facility was constructed or last modified prior to the applicability date.

Subpart XX - Standards of Performance for Bulk gasoline Terminals does not apply because this facility was constructed or last modified prior to the applicability date of December 17, 1980.

7.2.2 Maximum Achievable Control Technology Standards (MACT)

Gasoline Distribution MACT does not apply because this facility is not a major source of HAPS (ie. this facility does not have the potential to emit 10 tpy of any individual HAP or 25 tpy of any combination of HAPS).

7.2.3 Ambient Air Impact Analysis

There are no requirements to analyze the ambient air impact of VOC or HAP emissions from existing facilities.

APPENDIX: A STORAGE TANK EMISSIONS CALCULATIONS

Calculation of maximum potential VOC emissions and HAP emissions from all product storage tanks, the transmix storage tank and the prover tank were performed using Tanks Version 4.0 software[6] which utilizes AP-42 methodology. The emissions reports for these emissions units are provided in this Appendix.

[6] **Storage Tank Emissions Calculation Software, Version 4.0. Emissions Inventory Branch, Office of Air Quality Planning and Standards. USEPA.**

TANKS 4.0
Emissions Report - Detail Format
Tank Identification and Physical Characteristics

Identification

User Identification:	Tank 301, pt 1 Teir 2 emissions
City:	Burley
State:	Idaho
Company:	Sinlcair Oil Corp.
Type of Tank:	External Floating Roof Tank
Description:	Tier 2 operating permit renewal Tank 301 pt1, Tank 304 pt2, Tank 311 pt 3, Tank 321 pt4

Tank Dimensions

Diameter (ft):	60.00
Volume (gallons):	838,437.00
Turnovers:	103.00

Paint Characteristics

Internal Shell Condition:	Light Rust
Shell Color/Shade:	White/White
Shell Condition:	Good

Roof Characteristics

Type:	Double Deck
Fitting Category:	Detail

Tank Construction and Rim-Seal System

Construction:	Welded
Primary Seal:	Mechanical Shoe
Secondary Seal:	Rim-mou[illegible]

Deck Fitting/Status	Quantity
Access Hatch (24-in. Diam.)/Bolted Cover, Gasketed	1
Automatic Gauge Float Well/Unbolted Cover, Ungasketed	1
Vacuum Breaker (10-in. Diam.)/Weighted Mech. Actuation, Gask.	1
Gauge-Hatch/Sample Well (8-in. Diam.)/Weighted Mech. Actuation, Ungask.	1
Roof Drain (3-in. Diameter)/Open	1
Roof Leg (3-in. Diameter)/Adjustable, Double-Deck Roofs	10
Rim Vent (6-in. Diameter)/Weighted Mech. Actuation, Gask.	1
Slotted Guide-Pole/Sample Well/Ungask. Sliding Cover, w/o Float	1

Meteorological Data used in Emissions Calculations: Pocatello, Idaho (Avg Atmospheric Pressure = 12.53 psia)

TANKS 4.0
Emissions Report - Detail Format
Liquid Contents of Storage Tank

Mixture/Component	Month	Daily Liquid Surf. Temperatures (deg F) Avg	Min.	Max.	Liquid Bulk Temp. (deg F)	Vapor Pressures (psia) Avg	Min.	Max.	Vapor Mol. Weight	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight	Basis for Vapor Pressure Calculations
Gasoline (RVP 10)	All	48.21	41.93	54.49	46.37	4.1037	N/A	N/A	66.0000			92.00	Option 4: RVP=10, ASTM Slope=3
2,2,4-Trimethylpentane						0.4200	N/A	N/A	114.2300	0.0151	0.0022	114.23	Option 2: A=6.8118, B=1257.84, C=220.74
Benzene						0.8343	N/A	N/A	78.1100	0.0188	0.0053	78.11	Option 2: A=6.905, B=1211.033, C=220.79
Ethylbenzene						0.0711	N/A	N/A	106.1700	0.0207	0.0005	106.17	Option 2: A=6.975, B=1424.255, C=213.21
Hexane (-n)						1.3958	N/A	N/A	86.1700	0.0181	0.0086	86.17	Option 2: A=6.876, B=1171.17, C=224.41
Isopropyl benzene						0.0324	N/A	N/A	120.2000	0.0022	0.0000	120.20	Option 2: A=6.963, B=1460.793, C=207.78
naphthalene						0.0014	N/A	N/A	128.1600	0.0013	0.0000	128.16	Option 2: A=7.1463, B=1831.571, C=211.821
Toluene						0.2263	N/A	N/A	92.1300	0.0972	0.0075	92.13	Option 2: A=6.954, B=1344.8, C=219.48
Unidentified Components						5.5823	N/A	N/A	65.5348	0.7021	0.9737	89.60	
Xylene (-m)						0.0590	N/A	N/A	106.1700	0.0672	0.0013	106.17	Option 2: A=7.009, B=1462.266, C=215.11
Xylene (-o)						0.0460	N/A	N/A	106.1700	0.0573	0.0009	106.17	Option 2: A=6.998, B=1474.679, C=213.69

TANKS 4.0
Emissions Report - Detail Format
Detail Calculations (AP-42)

Annual Emission Calculations	
Rim Seal Losses (lb):	1,819.6014
Seal Factor A (lb-mole/ft-yr):	0.6000
Seal Factor B (lb-mole/ft-yr (mph)^n)	0.4000
Average Wind Speed (mph):	10.1167
Seal-related Wind Speed Exponent:	1.0000
Value of Vapor Pressure Function:	0.0989
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	4.1037
Tank Diameter (ft):	60.0000
Vapor Molecular Weight (lb/lb-mole):	66.0000
Product Factor:	1.0000
Withdrawal Losses (lb):	271.4551
Annual Net Throughput (gal/yr.):	86,359,000.00 00
Shell Clingage Factor (bbl/1000 sqft)	0.0015
Average Organic Liquid Density (lb/gal)	5.6000
Tank Diameter (ft)	60.0000
Roof Fitting Losses (lb):	28,251.7303
Value of Vapor Pressure Function:	0.0989
Vapor Molecular Weight (lb/lb-mole):	66.0000
Product Factor:	1.0000
Tot. Roof Fitting Loss Fact.(lb-mole/yr):	4,328.7407
Average Wind Speed (mph)	10.1167

Roof Fitting/Status	Quantity	Roof Fitting Loss Factors KFa (lb-mole/yr)	KFb (lb-mole/(yr mph^n))	m	Losses (lb)
Access Hatch (24-in. Diam.)/Bolted Cover, Gasketed	1	1.60	0.00	0.00	10.4425
Automatic Gauge Float Well/Unbolted Cover, Ungasketed	1	14.00	5.40	1.10	394.9189
Vacuum Breaker (10-in. Diam.)/Weighted Mech. Actuation, Gask	1	6.20	1.20	0.94	89.7811
Gauge-Hatch/Sample Well (8-in. Diam.)/Weighted Mech. Actuation, Ungask	1	2.30	0.00	0.00	15.0111
Roof Drain (3-in. Diameter)/Open	1	1.50	0.21	1.70	47.9960
Roof Leg (3-in. Diameter)/Adjustable, Double-Deck Roofs	10	0.82	0.53	0.14	99.0142
Rim Vent (6-in. Diameter)/Weighted Mech. Actuation, Gask	1	0.71	0.10	1.00	9.2557
Slotted Guide-Pole/Sample Well/Ungask. Sliding Cover, w/o Float	1	43.00	270.00	1.40	27,585.3109

Total Losses (lb):	30,342.7867

TANKS 4.0
Emissions Report - Detail Format
Individual Tank Emission Totals

Annual Emissions Report

	Losses(lbs)				
Components	Rim Seal Loss	Withdrawal Loss	Deck Fitting Loss	Deck Seam Loss	Total Emissions
Gasoline (RVP 10)	1,819.60	271.46	28,251.73	0.00	30,342.79
Benzene	9.69	5.10	150.51	0.00	165.31
Ethylbenzene	0.91	5.62	14.13	0.00	20.66
Hexane (-n)	15.61	4.91	242.44	0.00	262.97
naphthalene	0.00	0.35	0.02	0.00	0.37
Xylene (-m)	2.45	18.24	38.04	0.00	58.73
Xylene (-o)	1.63	15.55	25.27	0.00	42.45
Toluene	13.59	26.39	211.06	0.00	251.04
2,2,4-Trimethylpentane	3.92	4.10	60.86	0.00	68.87
Isopropyl benzene	0.04	0.60	0.68	0.00	1.33
Unidentified Components	1,771.75	190.59	27,508.72	0.00	29,471.06

TANKS 4.0
Emissions Report - Detail Format
Tank Identification and Physical Characteristics

Identification

User Identification:	Tank 302 pt 5 tier 2 emissions
City:	Burley
State:	Idaho
Company:	Sinclair Oil Corp.
Type of Tank:	Vertical Fixed Roof Tank
Description:	Tank 302 pt5, Tank 305 pt 6, Tank 306 pt 7

Tank Dimensions

Shell Height (ft):	40.00
Diameter (ft):	60.00
Liquid Height (ft):	39.00
Avg. Liquid Height (ft):	20.00
Volume (gallons):	825,024.00
Turnovers:	189.00
Net Throughput (gal/yr):	155,599,500.00
Is Tank Heated (y/n):	N

Paint Characteristics

Shell Color/Shade:	White/White
Shell Condition:	Good
Roof Color/Shade:	White/White
Roof Condition:	Good

Roof Characteristics

Type:	Cone
Height (ft):	2.00
Slope (ft/ft) (Cone Roof):	0.07

Breather Vent Settings

Vacuum Settings (psig):	-0.03
Pressure Settings (psig):	0.03

Meteorological Data used in Emissions Calculations: Pocatello, Idaho (Avg Atmospheric Pressure = 12.53 psia)

TANKS 4.0
Emissions Report - Detail Format
Liquid Contents of Storage Tank

Mixture/Component	Month	Daily Liquid Surf. Temperatures (deg F) Avg.	Min.	Max.	Liquid Bulk Temp. (deg F)	Vapor Pressures (psia) Avg.	Min.	Max.	Vapor Mol. Weight	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight	Basis for Vapor Pressure Calculations
Distillate fuel oil no. 2	All	48.21	41.93	54.49	46.37	0.0044	0.0035	0.0054	130.0000			188.00	Option 5: A=12.101, B=8907
naphthalene						0.0014	0.0010	0.0019	128.1600	0.0017	0.0008	128.16	Option 2: A=7.1463, B=1831.571, C=211.621
Toluene						0.2263	0.1834	0.2774	92.1300	0.0002	0.0150	92.13	Option 2: A=6.954, B=1344.8, C=219.48
Unidentified Components						0.0042	0.0041	0.0041	131.3375	0.9972	0.9679	188.32	
Xylene (-m)						0.0590	0.0465	0.0743	106.1700	0.0006	0.0118	106.17	Option 2: A=7.009, B=1462.266, C=215.11
Xylene (-o)						0.0460	0.0361	0.0581	106.1700	0.0003	0.0046	106.17	Option 2: A=6.998, B=1474.679, C=213.69

TANKS 4.0
Emissions Report - Detail Format
Detail Calculations (AP-42)

Annual Emission Calculations	
Standing Losses (lb)	98.8055
Vapor Space Volume (cu ft)	58,433.6233
Vapor Density (lb/cu ft)	0.0001
Vapor Space Expansion Factor	0.0448
Vented Vapor Saturation Factor	0.9953
Tank Vapor Space Volume	
Vapor Space Volume (cu ft)	58,433.6233
Tank Diameter (ft)	60.0000
Vapor Space Outage (ft)	20.6667
Tank Shell Height (ft)	40.0000
Average Liquid Height (ft)	20.0000
Roof Outage (ft)	0.6667
Roof Outage (Cone Roof)	
Roof Outage (ft)	0.6667
Roof Height (ft)	2.0000
Roof Slope (ft/ft)	0.0700
Shell Radius (ft)	30.0000
Vapor Density	
Vapor Density (lb/cu ft)	0.0001
Vapor Molecular Weight (lb/lb-mole)	130.0000
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	0.0044
Daily Avg. Liquid Surface Temp. (deg. R)	507.8766
Daily Average Ambient Temp. (deg. F)	46.3542
Ideal Gas Constant R (psia cuft / (lb-mol-deg R))	10.731
Liquid Bulk Temperature (deg. R)	506.0442
Tank Paint Solar Absorptance (Shell)	0.1700
Tank Paint Solar Absorptance (Roof)	0.1700
Daily Total Solar Insulation Factor (Btu/sqft day)	1,371.0030
Vapor Space Expansion Factor	
Vapor Space Expansion Factor	0.0448
Daily Vapor Temperature Range (deg. R)	25.1200
Daily Vapor Pressure Range (psia)	0.0019
Breather Vent Press. Setting Range(psia)	0.0600
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	0.0044
Vapor Pressure at Daily Minimum Liquid Surface Temperature (psia)	0.0035
Vapor Pressure at Daily Maximum Liquid Surface Temperature (psia)	0.0054
Daily Avg. Liquid Surface Temp. (deg R)	507.8766
Daily Min. Liquid Surface Temp. (deg R)	501.5966
Daily Max. Liquid Surface Temp. (deg R)	514.1566
Daily Ambient Temp. Range (deg. R)	25.8250
Vented Vapor Saturation Factor	
Vented Vapor Saturation Factor	0.9953
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	0.0044
Vapor Space Outage (ft)	20.6667

TANKS 4.0
Emissions Report - Detail Format
Detail Calculations (AP-42)- (Continued)

Working Losses (lb)	682.3016
Vapor Molecular Weight (lb/lb-mole)	130.0000
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	0.0044
Annual Net Throughput (gal/yr.)	155,599,500.0000
Annual Turnovers:	189.0000
Turnover Factor:	0.3254
Maximum Liquid Volume (gal)	825,024.0000
Maximum Liquid Height (ft)	39.0000
Tank Diameter (ft)	60.0000
Working Loss Product Factor:	1.0000
Total Losses (lb)	781.1070

TANKS 4.0
Emissions Report - Detail Format
Individual Tank Emission Totals

Annual Emissions Report

	Losses(lbs)		
Components	Working Loss	Breathing Loss	Total Emissions
Distillate fuel oil no. 2	682.30	98.81	781.11
naphthalene	0.53	0.08	0.61
Toluene	10.26	1.49	11.74
Xylene (-m)	8.02	1.16	9.18
Xylene (-o)	3.12	0.45	3.58
Unidentified Components	660.37	95.63	756.00

TANKS 4.0
Emissions Report - Detail Format
Tank Identification and Physical Characteristics

Identification

User Identification:	Tmix pt 8 tier 2 emissions
City:	Burley
State:	Idaho
Company:	Sinclair Oil Corp.
Type of Tank:	Vertical Fixed Roof Tank
Description:	transmix tier 2 emissions

Tank Dimensions

Shell Height (ft):	20.00
Diameter (ft):	6.00
Liquid Height (ft):	18.00
Avg. Liquid Height (ft):	5.00
Volume (gallons):	3,808.00
Turnovers:	10.00
Net Throughput (gal/yr):	38,080.00
Is Tank Heated (y/n):	N

Paint Characteristics

Shell Color/Shade:	White/White
Shell Condition:	Good
Roof Color/Shade:	White/White
Roof Condition:	Good

Roof Characteristics

Type:	Cone
Height (ft):	2.00
Slope (ft/ft) (Cone Roof):	0.67

Breather Vent Settings

Vacuum Settings (psig):	-0.03
Pressure Settings (psig):	0.03

Meteorological Data used in Emissions Calculations: Pocatello, Idaho (Avg Atmospheric Pressure = 12.53 psia)

TANKS 4.0
Emissions Report - Detail Format
Liquid Contents of Storage Tank

Mixture/Component	Month	Daily Liquid Surf. Temperatures (deg F) Avg.	Min.	Max.	Liquid Bulk Temp. (deg F)	Vapor Pressures (psia) Avg	Min.	Max.	Vapor Mol. Weight	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight	Basis for Vapor Pressure Calculations
Gasoline (RVP 10)	All	48.21	41.93	54.49	46.37	4.1037	3.6067	4.6545	66.0000			92.00	Option 4: RVP=10, ASTM Slope=3
2,2,4-Trimethylpentane						0.4200	0.3458	0.5071	114.2300	0.0151	0.0022	114.23	Option 2: A=6.8118, B=1257.84, C=220.74
Benzene						0.8343	0.6919	1.0003	78.1100	0.0188	0.0053	78.11	Option 2: A=6.905, B=1211.033, C=220.79
Ethylbenzene						0.0711	0.0562	0.0893	106.1700	0.0207	0.0005	106.17	Option 2: A=6.975, B=1424.255, C=213.21
Hexane (-n)						1.3958	1.1713	1.6547	86.1700	0.0181	0.0086	86.17	Option 2: A=6.876, B=1171.17, C=224.41
Isopropyl benzene						0.0324	0.0252	0.0415	120.2000	0.0022	0.0000	120.20	Option 2: A=6.963, B=1460.793, C=207.78
naphthalene						0.0014	0.0010	0.0019	128.1600	0.0013	0.0000	128.16	Option 2: A=7.1463, B=1831.571, C=211.821
Toluene						0.2263	0.1834	0.2774	92.1300	0.0972	0.0075	92.13	Option 2: A=6.954, B=1344.8, C=219.48
Unidentified Components						5.5823	5.5593	5.5594	65.5348	0.7021	0.9737	89.60	
Xylene (-m)						0.0590	0.0465	0.0743	106.1700	0.0672	0.0013	106.17	Option 2: A=7.009, B=1462.266, C=215.11
Xylene (-o)						0.0460	0.0361	0.0581	106.1700	0.0573	0.0009	106.17	Option 2: A=6.998, B=1474.679, C=213.69

TANKS 4.0
Emissions Report - Detail Format
Detail Calculations (AP-42)

Annual Emission Calculations	
Standing Losses (lb)	303.9487
Vapor Space Volume (cu ft)	442.9646
Vapor Density (lb/cu ft)	0.0497
Vapor Space Expansion Factor	0.1667
Vented Vapor Saturation Factor	0.2269
Tank Vapor Space Volume	
Vapor Space Volume (cu ft)	442.9646
Tank Diameter (ft)	6.0000
Vapor Space Outage (ft)	15.6667
Tank Shell Height (ft)	20.0000
Average Liquid Height (ft)	5.0000
Roof Outage (ft)	0.6667
Roof Outage (Cone Roof)	
Roof Outage (ft)	0.6667
Roof Height (ft)	2.0000
Roof Slope (ft/ft)	0.6700
Shell Radius (ft)	3.0000
Vapor Density	
Vapor Density (lb/cu ft)	0.0497
Vapor Molecular Weight (lb/lb-mole)	66.0000
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	4.1037
Daily Avg. Liquid Surface Temp. (deg. R)	507.8766
Daily Average Ambient Temp. (deg. F)	46.3542
Ideal Gas Constant R (psia cuft / (lb-mol-deg R))	10.731
Liquid Bulk Temperature (deg. R)	506.0442
Tank Paint Solar Absorptance (Shell)	0.1700
Tank Paint Solar Absorptance (Roof)	0.1700
Daily Total Solar Insulation Factor (Btu/sqft day)	1,371.0030
Vapor Space Expansion Factor	
Vapor Space Expansion Factor	0.1667
Daily Vapor Temperature Range (deg. R)	25.1200
Daily Vapor Pressure Range (psia)	1.0479
Breather Vent Press. Setting Range(psia)	0.0600
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	4.1037
Vapor Pressure at Daily Minimum Liquid Surface Temperature (psia)	3.6067
Vapor Pressure at Daily Maximum Liquid Surface Temperature (psia)	4.6545
Daily Avg. Liquid Surface Temp. (deg R)	507.8766
Daily Min. Liquid Surface Temp. (deg R)	501.5966
Daily Max. Liquid Surface Temp. (deg R)	514.1566
Daily Ambient Temp. Range (deg. R)	25.8250
Vented Vapor Saturation Factor	
Vented Vapor Saturation Factor	0.2269
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	4.1037
Vapor Space Outage (ft)	15.6667

TANKS 4.0
Emissions Report - Detail Format
Detail Calculations (AP-42)- (Continued)

Working Losses (lb)	245.5652
Vapor Molecular Weight (lb/lb-mole)	66.0000
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	4.1037
Annual Net Throughput (gal/yr.)	38,080.0000
Annual Turnovers	10.0000
Turnover Factor	1.0000
Maximum Liquid Volume (gal)	3,808.0000
Maximum Liquid Height (ft)	18.0000
Tank Diameter (ft)	6.0000
Working Loss Product Factor	1.0000
Total Losses (lb)	549.5139

TANKS 4.0
Emissions Report - Detail Format
Individual Tank Emission Totals

Annual Emissions Report

	Losses(lbs)		
Components	Working Loss	Breathing Loss	Total Emissions
Ethylbenzene	0.12	0.15	0.27
Hexane (-n)	2.11	2.61	4.72
naphthalene	0.00	0.00	0.00
Toluene	1.83	2.27	4.11
Xylene (-o)	0.22	0.27	0.49
Xylene (-m)	0.33	0.41	0.74
2,2,4-Trimethylpentane	0.53	0.65	1.18
Isopropyl benzene	0.01	0.01	0.01
Unidentified Components	239.11	295.96	535.06
Gasoline (RVP 10)	245.57	303.95	549.51
Benzene	1.31	1.62	2.93

TANKS 4.0
Emissions Report - Detail Format
Tank Identification and Physical Characteristics

Identification

User Identification:	prover tk pt 9
City:	Burley
State:	Idaho
Company:	Sinclair Oil Corp.
Type of Tank:	Vertical Fixed Roof Tank
Description:	prover tier 2 emissions

Tank Dimensions

Shell Height (ft):	6.00
Diameter (ft):	5.00
Liquid Height (ft):	5.00
Avg. Liquid Height (ft):	2.00
Volume (gallons):	734.00
Turnovers:	300.00
Net Throughput (gal/yr):	220,200.00
Is Tank Heated (y/n):	N

Paint Characteristics

Shell Color/Shade:	White/White
Shell Condition:	Good
Roof Color/Shade:	White/White
Roof Condition:	Good

Roof Characteristics

Type:	Cone
Height (ft):	2.00
Slope (ft/ft) (Cone Roof):	0.80

Breather Vent Settings

Vacuum Settings (psig):	-0.03
Pressure Settings (psig):	0.03

Meteorological Data used in Emissions Calculations: Pocatello, Idaho (Avg Atmospheric Pressure = 12.53 psia)

TANKS 4.0
Emissions Report - Detail Format
Liquid Contents of Storage Tank

Mixture/Component	Month	Daily Liquid Surf. Temperatures (deg F) Avg.	Min.	Max.	Liquid Bulk Temp. (deg F)	Vapor Pressures (psia) Avg.	Min.	Max.	Vapor Mol. Weight	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight	Basis for Vapor Pressure Calculations
Gasoline (RVP 10)	All	48.21	41.93	54.49	46.37	4.1037	3.6067	4.6545	66.0000			92.00	Option 4: RVP=10, ASTM Slope=3
2,2,4-Trimethylpentane						0.4200	0.3458	0.5071	114.2300	0.0151	0.0022	114.23	Option 2: A=6.8118, B=1257.84, C=220.74
Benzene						0.8343	0.6919	1.0003	78.1100	0.0188	0.0053	78.11	Option 2: A=6.905, B=1211.033, C=220.79
Ethylbenzene						0.0711	0.0562	0.0893	106.1700	0.0207	0.0005	106.17	Option 2: A=6.975, B=1424.255, C=213.21
Hexane (-n)						1.3958	1.1713	1.6547	86.1700	0.0181	0.0086	86.17	Option 2: A=6.876, B=1171.17, C=224.41
Isopropyl benzene						0.0324	0.0252	0.0415	120.2000	0.0022	0.0000	120.20	Option 2: A=6.963, B=1460.793, C=207.78
naphthalene						0.0014	0.0010	0.0019	128.1600	0.0013	0.0000	128.16	Option 2: A=7.1463, B=1831.571, C=211.821
Toluene						0.2263	0.1834	0.2774	92.1300	0.0972	0.0075	92.13	Option 2: A=6.954, B=1344.8, C=219.48
Unidentified Components						5.5823	5.5593	5.5594	65.5348	0.7021	0.9737	89.60	
Xylene (-m)						0.0590	0.0465	0.0743	106.1700	0.0672	0.0013	106.17	Option 2: A=7.009, B=1462.266, C=215.11
Xylene (-o)						0.0460	0.0361	0.0581	106.1700	0.0573	0.0009	106.17	Option 2: A=6.998, B=1474.679, C=213.69

TANKS 4.0
Emissions Report - Detail Format
Detail Calculations (AP-42)

Annual Emission Calculations	
Standing Losses (lb)	137.5255
Vapor Space Volume (cu ft)	91.6298
Vapor Density (lb/cu ft)	0.0497
Vapor Space Expansion Factor	0.1667
Vented Vapor Saturation Factor	0.4963
Tank Vapor Space Volume	
Vapor Space Volume (cu ft)	91.6298
Tank Diameter (ft)	5.0000
Vapor Space Outage (ft)	4.6667
Tank Shell Height (ft)	6.0000
Average Liquid Height (ft)	2.0000
Roof Outage (ft)	0.6667
Roof Outage (Cone Roof)	
Roof Outage (ft)	0.6667
Roof Height (ft)	2.0000
Roof Slope (ft/ft)	0.8000
Shell Radius (ft)	2.5000
Vapor Density	
Vapor Density (lb/cu ft)	0.0497
Vapor Molecular Weight (lb/lb-mole)	66.0000
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	4.1037
Daily Avg. Liquid Surface Temp. (deg. R)	507.8766
Daily Average Ambient Temp. (deg. F)	46.3542
Ideal Gas Constant R (psia cuft / (lb-mol-deg R))	10.731
Liquid Bulk Temperature (deg. R)	506.0442
Tank Paint Solar Absorptance (Shell)	0.1700
Tank Paint Solar Absorptance (Roof)	0.1700
Daily Total Solar Insulation Factor (Btu/sqft day)	1,371.0030
Vapor Space Expansion Factor	
Vapor Space Expansion Factor	0.1667
Daily Vapor Temperature Range (deg. R)	25.1200
Daily Vapor Pressure Range (psia)	1.0479
Breather Vent Press. Setting Range(psia)	0.0600
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	4.1037
Vapor Pressure at Daily Minimum Liquid Surface Temperature (psia)	3.6067
Vapor Pressure at Daily Maximum Liquid Surface Temperature (psia)	4.6545
Daily Avg. Liquid Surface Temp. (deg R)	507.8766
Daily Min. Liquid Surface Temp. (deg R)	501.5966
Daily Max. Liquid Surface Temp. (deg R)	514.1566
Daily Ambient Temp. Range (deg. R)	25.8250
Vented Vapor Saturation Factor	
Vented Vapor Saturation Factor	0.4963
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	4.1037
Vapor Space Outage (ft)	4.6667

TANKS 4.0
Emissions Report - Detail Format
Detail Calculations (AP-42)- (Continued)

Working Losses (lb)	378.6656
Vapor Molecular Weight (lb/lb-mole)	66.0000
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	4.1037
Annual Net Throughput (gal/yr.)	220,200.0000
Annual Turnovers	300.0000
Turnover Factor	0.2667
Maximum Liquid Volume (gal)	734.0000
Maximum Liquid Height (ft)	5.0000
Tank Diameter (ft)	5.0000
Working Loss Product Factor	1.0000
Total Losses (lb)	516.1910

TANKS 4.0
Emissions Report - Detail Format
Individual Tank Emission Totals

Annual Emissions Report

	Losses(lbs)		
Components	Working Loss	Breathing Loss	Total Emissions
Gasoline (RVP 10)	378.67	137.53	516.19
Ethylbenzene	0.19	0.07	0.26
Hexane (-n)	3.25	1.18	4.43
naphthalene	0.00	0.00	0.00
Toluene	2.83	1.03	3.86
Xylene (-o)	0.34	0.12	0.46
Xylene (-m)	0.51	0.19	0.69
2,2,4-Trimethylpentane	0.82	0.30	1.11
Isopropyl benzene	0.01	0.00	0.01
Unidentified Components	368.71	133.91	502.62
Benzene	2.02	0.73	2.75

APPENDIX: B LOADING RACK EMISSIONS CALCULATIONS

Calculation of potential VOC emissions from the loading rack system were based upon AP-42 methodology[7]. Calculation of maximum potential HAP emissions from the loading rack system were based upon the maximum potential VOC emission rate speciated for HAPS. Speciation of HAPs was obtained from the vapor mass fractions listed in the Tanks Version 4.0 output (re: Appendix: A). The maximum potential emission calculations for gasoline loading and distillate fuel oil loading follow.

[7] **Compilation of Air Pollution Factors, Volume 1 Stationary and Area Point Sources, Section 5.2, equation (1), AP-42, Fifth Edition, January 1995. USEPA.**

Sinclair Oil Corp., Burley Terminal
Tier 1 Renewal Rev. 0, May 16, 2003
Loading Rack Emissions
EU#11

Facility Input:

Gasoline	7000 BPD	2555000 BPY
Distillate Fuel Oil	30202 BPD	11023714 BPY

Gasoline:

Annual Throughput	2555000 BPY
Annual Throughput	107310 M gpy

Formula: Loading Losses (lb/1000 gal) = (12.46)(S)(P)(M)/T Re: AP-42

Where: S = saturation factor
P = True Vapor Pressure (psia)
M = Molecular Weight of Vapor
T = Liquid Temperature (deg. R)

MW	66
Pvap	4.1037 psia
Saturation Factor	1
Temperature	506.4 deg. R
Emission Factor	6.6641 lb/M gal
Total VOC emission rate	357.56 TPY

	Component	Vapor Mass Fraction	Emission Rate (TPY)	HAP Emission Rate (TPY)
1	Benzene	0.0053	1.8951	1.8951
2	Hexane	0.0086	3.0751	3.0751
3	Xylene-o	0.0009	0.3218	0.3218
4	Xylene-m	0.0013	0.4648	0.4648
5	Xylene-p (inc. with o & m)	0.0000	0.0000	0.0000
6	Toluene	0.0075	2.6817	2.6817
7	Ethylbenzene	0.0005	0.1788	0.1788
8	Naphthalene	0.0000	0.0002	0.0002
9	Trimethylpentane (2,2,4)	0.0022	0.7866	0.7866
10	Cumene	0.0000	0.0112	0.0112
11	Non HAP gasoline	0.9737	348.1489	
	SUBTOTAL	1.00	357.56	9.42

Distillate Fuel Oil

Annual Throughput	11023714 BPY
Annual Throughput	462996 M gpy

Formula: Loading Losses (lb/1000 gal) = (12.46)(S)(P)(M)/T Re: AP-42

Where: S = saturation factor
P = True Vapor Pressure (psia)
M = Molecular Weight of Vapor
T = Liquid Temperature (deg. R)

MW	130
Pvap	0.0044 psia
Saturation Factor	1
Temperature	506.4 deg. R
Emission Factor	0.0141 lb/M gal
Total VOC emission rate	3.26 TPY

	Component	Vapor Mass Fraction	Emission Rate (TPY)	HAP Emission Rate (TPY)
1	Benzene	0	0.0000	0.0000
2	Hexane	0	0.0000	0.0000
3	Xylene-o	0.00458	0.0149	0.0149
4	Xylene-m	0.01179	0.0384	0.0384
5	Xylene-p (inc. with o & m)	0	0.0000	0.0000
6	Toluene	0.01499	0.0488	0.0488
7	Ethylbenzene	0	0.0000	0.0000
8	Naphthalene	0.00079	0.0026	0.0026
9	Trimethylpentane (2,2,4)	0	0.0000	0.0000
10	Cumene	0	0.0000	0.0000
11	Non HAP Fuel oil	0.96785	3.1534	
	SUBTOTAL	1.00	3.26	0.1047

SBG/sbg
5/16/03

APPENDIX: C FUGITIVE EMISSIONS CALCULATIONS

The potential fugitive emissions calculation was based upon the Protocol for Equipment Leak Emissions Estimates (EPA-453/R-95-017, Table 2-3) and AP-42 methodology and is listed in this Appendix.

Sinclair Oil Corp., Burley Terminal
Tier 2 Renewal Rev. 1, March 27, 2002
Fugitive Emissions
EU#12

Fugitive VOC emissions

Re: Protocol for Equipment Leak Emission Estimates
(EPA-453/R-95-017, Table 2-3)
AP-42, 4 ed, (Fugitive Emission Factors, Table 9.1-2)

	Source		Pump Seals	Valves	Flanges	Drains	Others	VOC Emission Rate (TPY)
1	Gasoline service							
	Quantity		8	200	400	3	30	
	Emissions Factor	(lb/hr-source)	0.00119	0.0000948	0.0000176	0.07	0.000287	
	Emissions	(TPY)	0.0416976	0.0830448	0.0308352	0.9198	0.0377118	1.11
2	Distillate oil service							
	Quantity		5	100	300	0	30	
	Emissions Factor	(lb/hr-source)	0.00119	0.0000948	0.0000176	0.07	0.000287	
	Emissions	(TPY)	0.026061	0.0415224	0.0231264	0	0.0377118	0.13
	TOTAL VOC EMISSIONS							1.24

SBG/sbg
3/27/02

Fugitive emissions - gasoline service

	Component	Liquid Mass Fraction	VOC Emission Rate (TPY)	HAP Emission Rate (TPY)
1	Benzene	0.0188	0.021	0.021
2	Hexane	0.0181	0.020	0.020
3	Xylene-o	0.0573	0.064	0.064
4	Xylene-m	0.0672	0.075	0.075
5	Xylene-p (inc. with o & m)	0.0000	0.000	0.000
6	Toluene	0.0972	0.108	0.108
7	Ethylbenzene	0.0207	0.023	0.023
8	Naphthalene	0.0013	0.001	0.001
9	Trimethylpentane (2,2,4)	0.0151	0.017	0.017
10	Cumene	0.0022	0.002	0.002
11	Non HAP Gasoline	0.7021	0.782	
	TOTAL	1.0000	1.113	0.332

Fugitive emissions - fuel oil service

	Component	Liquid Mass Fraction	VOC Emissi Rate (TPY)	HAP Emission Rate (TPY)
1	Benzene	0.0000	0.0000	0.0000
2	Hexane	0.0000	0.0000	0.0000
3	Xylene-o	0.0003	0.0000	0.0000
4	Xylene-m	0.0006	0.0001	0.0001
5	Xylene-p (inc. with o & m)	0.0000	0.0000	0.0000
6	Toluene	0.0002	0.0000	0.0000
7	Ethylbenzene	0.0000	0.0000	0.0000
8	Naphthalene	0.0017	0.0002	0.0002
9	Trimethylpentane (2,2,4)	0.0000	0.0000	0.0000
10	Cumene	0.0000	0.0000	0.0000
11	Non HAP Fuel Oil	0.9972	0.1281	
	TOTAL	1.0000	0.1284	0.0004

TOTAL VOC EMISSION RATE (TPY)= 1.24
TOTAL HAP EMISSION RATE (TPY)= 0.33

APPENDIX: D October 14, 2004 Permit to construct Waiver – SVE System

file: Burley IHx

STATE OF IDAHO
DEPARTMENT OF
ENVIRONMENTAL QUALITY

1410 North Hilton • Boise, Idaho 83706-1255 • (208) 373-0502

Dirk Kempthorne, Governor
Toni Hardesty, Director

October 14, 2004

Certified Mail No. 7000 0520 0016 0850 2864

Mark Petersen, Manager of Pipelines and Terminal
Sinclair Oil Corporation
P.O. Box 30825
Salt Lake City, Utah 84139

RE: Facility ID No. 031-00026, Sinclair Oil Corporation, Burley
Permit to Construct Exemption – SVE

Dear Mr. Petersen:

On September 30, 2003, the Idaho Department of Environmental Quality (DEQ) received notification regarding the expansion of operations of the soil vapor extraction (SVE) unit at its Burley terminal. Based on review of the submitted materials and all applicable state and federal rules and regulations, DEQ has determined that the project still meets the permit to construct exemption requirements in accordance with IDAPA 58.01.01.220 through 223 (*Rules for the Control of Air Pollution in Idaho*). Therefore, a PTC is not required for this project.

This letter is in no way intended to supersede any other federal, state, or local rules and regulations that may apply. Also, be advised that this letter does not constitute a waiver of any compliance actions that may result from misinformation or noncompliance of the criteria set in the submittal received for this project that may cause unreasonable risk to human or animal life, or violate any ambient air quality standard.

If you have any questions regarding this letter or about the air quality permitting process, please contact Bill Rogers at (208) 373-0502.

Sincerely,

Martin Bauer

Martin Bauer, Administrator
Air Quality Division

MB/ABC/sd Project No. X-040413

c: Steve VanZandt, Twin Falls Regional Office
Almer Casile, Permit Writer
Bill Rogers, Permit Coordinator
Laurie Kral, Region 10 USEPA

Air Quality Permitting
Statement of Basis

October 7, 2004

Permit to Construct No. X-040413

Sinclair Oil Corporation, Burley

Facility ID No. 031-00027

Prepared by:

Almer Casile, Permit Writer
AIR QUALITY DIVISION

Permit to Construct Exemption Concurrence

Table of Contents

Acronyms, Units, and Chemical Nomenclatures

acfm	actual cubic feet per minute
AFS	AIRS Facility Subsystem
AIRS	Aerometric Information Retrieval System
AQCR	Air Quality Control Region
ASTM	American Society for Testing and Materials
CAA	Clean Air Act
cfm	cubic feet per minute
CFR	Code of Federal Regulations
CO	carbon monoxide
DEQ	Department of Environmental Quality
EPA	U.S. Environmental Protection Agency
HAPs	Hazardous Air Pollutants
IDAPA	a numbering designation for all administrative rules in Idaho promulgated in accordance with the Idaho Administrative Procedures Act
lb/hr	pound per hour
MACT	Maximum Achievable Control Technology
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO_X	nitrogen oxides
NSPS	New Source Performance Standards
O_3	ozone
PM	particulate matter
PM_{10}	particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers
PSD	Prevention of Significant Deterioration
PTC	permit to construct
PTE	potential to emit
Rules	Rules for the Control of Air Pollution in Idaho
SIC	Standard Industrial Classification
SIP	State Implementation Plan
SO_2	sulfur dioxide
T/yr	tons per year
UTM	Universal Transverse Mercator
VOC	volatile organic compound

1. PURPOSE

The purpose for this memorandum is to satisfy the requirements of IDAPA 58.01.01.200, Rules for the Control of Air Pollution in Idaho, for issuing permits to construct.

2. FACILITY DESCRIPTION

Sinclair Oil Corporation (Sinclair), in conjunction with Chevron Pipeline, Tesoro Petroleum Companies operates a petroleum products storage facility at the Burley Product Terminals in Burley. The equipment in this project includes a SVE system that is used to remove hydrocarbons from contaminated soil.

3. FACILITY / AREA CLASSIFICATION

The facility is a major facility as defined by IDAPA 58.01.01.008.10 because the facility's potential to emit for VOC is greater than or equal to 100 T/yr. The facility is not a major facility with regard to HAP emissions. The facility is not a designated facility as defined by IDAPA 58.01.01.006.27.

The facility is located within AQCR 63 and UTM zone 12. The facility is located in Cassia County, which is designated as unclassifiable for all criteria pollutants.

The AIRS information provided in Appendix B defines the classification for each regulated air pollutant at the facility. This required information is entered into the EPA AIRs database.

4. APPLICATION SCOPE

Sinclair Oil Corporation (Sinclair), in conjunction with Chevron Pipeline, Tesoro Petroleum Companies is proposing to expand operations of the soil vapor extraction (SVE) system at the Burley Product Terminals in Burley. Sinclair seeks concurrence of its SVE system self-exemption as it pertains to DEQ's Guidance For Remediation Of Petroleum Contaminated Media.

4.1 Application Chronology

September 30, 2004	DEQ received notification of expansion of the SVE system from Sinclair's consultant Maxim.

5. PERMIT ANALYSIS

This section of the Statement of Basis describes the regulatory requirements for this PTC action.

5.1 Equipment Listing

The equipment in this project includes a SVE system that is used to remove hydrocarbons from contaminated soil. The facility has installed additional soil vapor recovery points, modified the piping manifold to the handle the additional points, and extended the trunk line from the manifold to the vacuum source for the SVE. (See Appendix A for additional information.)

5.2 Emissions Inventory

The applicant tested for the VOC and benzene concentration in the effluent stream. The results of the tests show a benzene concentration of 2µg/liter and a VOC concentration of 1100µg/liter. The flow rate through the SVE system is 500 cubic feet per minute (cfm). Using SVE policy calculations, the resulting benzene and VOC emissions estimates are 0.09 lb/day and 9.02 T/yr, respectively.

5.3 Modeling

Since the benzene lb/day emissions are less than the 0.192 lb/day (which includes the short-term source factor as defined in IDAPA 58.01.01.210.15) as provided in DEQ's SVE policy, no modeling is required.

5.4 Regulatory Review

The self-exemption, as submitted by the facility, has satisfied the following guidance requirements:

1. Petroleum remediation only (not industrial solvents or other remediation projects).
2. Annual uncontrolled VOC emissions are estimated to be less than 100 tons per year (IDAPA 58.01.01.220.01.a.i).
3. For major sources, annual uncontrolled VOC emissions are estimated to be less than 40 tons per year (IDAPA 58.01.01.220.a.ii).
4. Not part of a new major facility or part of a proposed major modification (IDAPA 58.01.01.220.01.b).
5. An operational life of no more than five years (not for landfills) (IDAPA 58.01.01 006.34).
6. As can be determined from the submittal, the source is not located near a sensitive receptor.
7. Estimated benzene emissions are less than or equal to 0.192 lb/day (which includes the short-term source factor. Therefore, no control equipment and no minimum stack height is required.

5.5 Fee Review

No application fee or processing fee was required in accordance with IDAPA 58.01.01.224-225 because this project is for a permit to construct exemption concurrence.

Table 5.1 Emission Inventory

Emissions Inventory			
Pollutant	**Annual Emissions Increase (T/yr)**	**Annual Emissions Reduction (T/yr)**	**Annual Emissions Change (T/yr)**
NO_X	0.0	0	0.0
SO_2	0.0	0	0.0
CO	0.0	0	0.0
PM_{10}	0.0	0	0.0
VOC	0.0	6.88	6.88
TAPS/HAPS	0.0	0	0.0
Total:	0.0	0	**0.0**
Fee Due	**$ 0**		

6. RECOMMENDATION

Based on review of application materials and all applicable state and federal rules and regulations, staff concur that this project is exempt from permit to construct requirements

ABC/sd Permit No. X-040413

G:\Air Quality\Stationary Source\SS Ltd\Exempt\Sinclair Burley\X-040413\X-040413 SB.doc

APPENDIX A

Facility Exemption Concurrence Request
&
Emission Inventory

Shawnee Chen

From: Patricia Rayne
Sent: Thursday, October 19, 2006 8:54 AM
To: William Rogers; Shawnee Chen; Stephen Vanzandt
Cc: Marilyn Seymore; Phyllis Heitman; Betty Flowers; Sherry Davis; Patricia Rayne
Subject: RE: New projects - Sinclair Transportation, Burley - Change in Permit #
Follow Up Flag: Follow up
Flag Status: Red

See below: the Tier 2 permit # should be **T2-060446**

From: Patricia Rayne
Sent: Tuesday, October 17, 2006 10:57 AM
To: William Rogers; Shawnee Chen; Stephen Vanzandt
Cc: Marilyn Seymore; Patricia Rayne; Phyllis Heitman; Betty Flowers; Sherry Davis
Subject: New projects - Sinclair Transportation, Burley

New permitting projects:

T1-060445
Sinclair Transportation Company
031-00026
Received 10/12/06
T1 Renewal

T2-060446
Sinclair Transportation Company
031-00026
Received 10/12/06
T2 Renewal

Shawnee Chen assigned.